

UNIVERSAL
LIBRARY



127 316

UNIVERSAL
LIBRARY

INDEX OF MINING ENGINEERING LITERATURE

COMPRISING AN
INDEX OF MINING, METALLURGICAL, CIVIL, MECHANICAL,
ELECTRICAL AND CHEMICAL ENGINEERING
SUBJECTS AS RELATED TO MINING
ENGINEERING

ALSO
COSTS OF MINING AND METALLURGICAL
OPERATIONS, ETC.

BY
WALTER R. CRANE, PH.D.

DEAN OF THE SCHOOL OF MINES, AND PROFESSOR OF MINING, THE PENNSYLVANIA
STATE COLLEGE, AUTHOR OF "A TREATISE ON GOLD AND SILVER,"
"ORE MINING METHODS," AND NUMEROUS ARTICLES ON MINING

SECOND VOLUME
FIRST THOUSAND

NEW YORK
JOHN WILEY & SONS
LONDON: CHAPMAN & HALL, LIMITED
1912

PREFACE TO SECOND VOLUME OF INDEX

IN order that an index may be valuable it must be added to from time to time, including references to the new material in the current technical literature and annual proceedings of societies. To this end the Index of Mining Engineering Literature has been enlarged by the preparation of an additional volume covering the list of publications indexed for the first volume, besides a number of other publications. Still other publications would have been incorporated in this volume of the Index had they been available.

The two special features that distinguish this Index from others are cross-references and multiple references. By the former is meant the reference to other subjects under which information can be obtained relative to the special subject in question; and by the latter is meant the breaking up of a paper or article into a number of references which are distributed under appropriate headings.

The special feature of the present volume of the Index is the list of references on cost which are distributed over and cover practically every phase of mining and metallurgical practice. These references to costs are particularly interesting and valuable to the practicing engineer.

As was stated in the former volume of the Index, the work has been the result of the unaided labor of the author, and all errors are, therefore, due to his oversight.

WALTER R. CRANE.

SCHOOL OF MINES,
THE PENNSYLVANIA STATE COLLEGE,
June 1, 1912.

CONTENTS

	PAGE
ACCIDENTS IN MINING	1
Loss of Life in Mining; Causes of Accidents, Protection in Mining; Rescue Work in Mines; Compensation for Injuries; First Aid in Mining Accidents; Falls of Roof and Walls in Mines; Inundation of Mines; Coal Dust as an Explosive Agent; Chambers of Refuge; Mine Fires; Mine Regulations; Spontaneous Combustion in and about Mines; Mine Explosions; Poisoning and Injuries; Powder Explosions; Hoisting Accidents; Boiler Explosions; Earth and Snow Slides — Avalanches; Lightning Entering Mines.	
ANIMALS IN MINES	18
Stables.	
BLASTING IN MINES—METHODS AND CONDITIONS	18
Blasting in Metal Mines; Blasting in Coal Mines; Methods of Charging and Firing Explosives; Use of Compressed Air in Blasting; Arrangement of Holes in Blasting, Tamping and Tamping Materials; Quantity of Explosive that Should be Used; Large or Mammoth Blasts; Submarine Blasting, Lime Blasting.	
CHEMISTRY: METHODS AND PRACTICE	20
General; Determination of Bismuth, Molybdenum, Mercury, Tellurium, Wolfram, etc.; Acid Manufacture; Mineral Analysis; Lime and Cement Analysis; Determination of Antimony, Arsenic, etc.; Methods of Determining Sulphur; Gold and Silver Analysis, Paint Manufacture; Methods of Determining Lead, Methods of Determining Zinc, Chemical Analysis in Cyaniding; Determination of Cobalt, Nickel, Tungsten and Tin; Coal Analysis; Methods of Determining Copper; Electrolytic Analysis; Methods of Determining Iron	
COMPRESSED AIR IN MINING	28
General; Air Compressors, Types, Operation, etc., Hydraulic Air Compression and Compressors; Compressed Air Haulage; Explosions in Air Compressors, Diseases, etc.	
CLAYS AND THEIR USES	29
General Properties of Clays and Methods of Testing; Brick and Clay-Products.	
CONCENTRATION	30
General Preparation of Coal; Testing Plants and Laboratories; Theory of Concentration; Founders and Distributors; Jigs and Jigging; Hand Dressing, Sorting; Flotation Processes, Amalgamation of Gold and Silver; Flow Sheets; Use of Plates in Amalgamation, Pan Amalgamation; Amalgamating Apparatus (Amalgamators), The Patio Process of Amalgamation; Electrostatic Separation; Magnetic Separation; Concentrators, Tables, Buddles, etc.; Washing Coal and Mineral; Disposal of Waste; Hand Tests on Mineral; Classifiers and	

Classification, Slimes and Their Treatment; Sand Treatment; Dry Concentration; Salt Making, Practice in Milling Ores	
CONCRETE, MORTARS AND PLASTERS	46
Cement and Concrete, Their Properties and Uses; Use of Concrete in Mines.	
CONVEYORS FOR MINERAL AND COAL	49
Kinds of Conveyors, Operation, etc.; Conveyors Underground.	
COST OF MINING, MILLING AND METALLURGICAL OPERATIONS. . .	49
Cost Keeping; Cost of Accidents; Cost of Blasting, Cost of Cyaniding; Cost of Industrial Chemistry; Cost of Chlorination; Cost of Development; Cost of Drainage, Cost of Dams, etc., Cost of Dredging; Cost of Drilling and Boring; Cost of Excavating; Cost of Explosives and Blasting; Cost of Flume and Ditch Construction; Cost of Fuel; Cost of Handling and Storing; Cost of Haulage; Cost of Hoisting; Cost of Hydraulic Mining; Cost of Labor; Cost of Lighting; Cost of Maintenance and Depreciation; Cost of Metallurgical Treatment; Cost of Mine Examination; Cost of Mine and Mill Construction, Cost of Mining; Cost of Mining and Treatment; Cost of Coal Mining; Cost of Metal Mining; Cost of Milling; Cost of Operating Elevators and Conveyors; Cost of Ores and Metals; Cost of Packing and Portage; Cost of Pipe and Pipe Laying; Cost of Power; Cost of Producing Various Materials; Cost of Preserving Mine Timber; Cost of Prospecting; Cost of Pumping and Bailing, Cost of Reduction; Cost of Rope; Charges, Royalties, Taxes, etc.; Cost of Sampling; Cost of Shaft Sinking; Cost of Signaling; Cost of Sizing; Cost of Sorting; Cost of Stopping; Cost of Stripping; Cost of Supplies; Cost of Support; Cost of Surveying; Cost of Trammung; Cost of Operating Tramways; Cost of Transportation, Cost of Tunneling; Cost of Ventilation; Cost of Washing Coal and Ores; Cost of Water.	
DAMS FOR MINING PURPOSES	116
Stresses in Dams, Their Stability, and Other Data; Description of Dams and Their Construction; Underground Dams.	
MINING DISTRICTS.	117
Miscellaneous Districts; Africa; Alabama; Alaska, Argentine Republic; Arizona; Arkansas, Asia; Australia; Austria-Hungary; Belgium; Bolivia; Brazil; California; Canada; The Carolinas; Central America; Chile, China; Colombia and the Guanas; Colorado; Connecticut; Dakotas; Delaware; East Indies — Malaysia, Egypt; England; Florida; France; Georgia; Germany; Idaho; Illinois; India; Indiana; Iowa; Jamaica; Japan; Kansas; Kentucky, Korea; Louisiana; Maine; Maryland; Massachusetts; Mexico; Michigan; Minnesota, Mississippi; Missouri; Montana; Nebraska; Nevada; Newfoundland; New Hampshire, New Hebrides; New Jersey; New Mexico; New York; New Zealand; Nicaragua; Nova Scotia; Ohio; Oklahoma (Indian Territory); Oregon; Panama; Pennsylvania; Peru; Philippine Islands; Portugal; Rhode Island; Russia; Spain; Sweden; Tasmania; Tennessee; Texas; Turkey; United States (General); Utah; Venezuela; Vermont; Virginia; Washington; West Indies; West Virginia; Wisconsin; Wyoming.	

CONTENTS

vii

PAGE

179

MINE DRAINAGE...

Drainage in General; Theory of Pumping, Pump Tests, Efficiency, etc.; Pumps for Mine Use; Water Rings for Mine Shafts; Rotary Pumps; Cornish Pumps; Hand Pumps and Water Portage; Hydraulic Pumps; Siphons in Mines; Compressed Air Pumping; Vacuum Pumps; Sinking Pumps; Electrically-Driven Pumps; Bailing Water; Unwatering Shafts; Drainage Tunnels; Pipes and Pipe Fitting, Ditches and Channels, Valves, Valve-gear, Sumps, etc.

DRILLING AND BORING

183

General; Hand Drills; Machine or Power Drills; Air Hammer Drills; Electric Drills; Forming and Tempering Drills; Use of Bore Holes; Prospect Drilling; Drill Records and Reports; Churn Drills and Drilling; Diamond and Rotary Drills, Deep Drilling; Rate of Drilling; Submarine Drilling; Surveying Bore Holes; Reamers for Boring Apparatus.

THE INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION.

188

Economic and Industrial Features of Mining; Mining Statistics; The Development and Production of Precious Metal Mining; The Function of Gold and Silver; Conservation; The Copper Trade; The Iron Trade; The Coal Trade; Miscellaneous Production.

DUMPING DEVICES

194

Dumps, Cradles, Tipples, etc.; Rotary Dumps; Self-dumping Cages; Skip Dumps; Bucket Dumps

TECHNICAL EDUCATION

195

General; Indexes, Textbooks, Bibliographies, etc.; Scope of Technical Education; Mining Education, Engineering Schools, Mining Institutes; Correspondence and Trade Schools; Theory and Practice; Societies, Periodicals and Expositions; Experimentation and Research; Summer School Work; Definitions and Terms; Drawing, Blue-printing, etc.; Weights and Measures; Symbols; Models of Mines and Machinery; Engineering Laboratories, Government Mint, etc.; General Requirements of Engineering Education, Relation of Engineering Education to the Industries

EXPLOSIVES FOR MINING PURPOSES

206

Development of Explosives; Explosive Regulations for Cities, Mines, etc.; Kinds of Explosives; Manufacture of Explosives; Explosive Properties of Various Materials; Safety Explosives, Primers, Fuses, etc.; Use of Explosives in Mining; Quantity of Explosives Used in Mining; Testing Explosives; Handling Explosives; Storage of Explosives; Thawing Giant Powder.

FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

209

Composition and Characteristics of Coal; Decomposition of Coal; Coke, Its Properties and Manufacture; Peat as a Fuel; Power Generation by Oil; Buying Coal; Gas for Power: Its Generation and Use; Fuel Substitutes, etc., Briquetting of Fuels and Ores; Testing Fuels and Their Value.

GEOLOGY: MINERAL AND FOSSIL FUEL DEPOSITS

Geological Surveys; Geological Formations; Geology of Districts: General; Glaciers; Geology of Fuels and Ores, Fossil Animals and Plants; Geologic Progress and Studies; Types of Veins and Examples; Caverns and Natural Bridges; Faults: Rules Regarding Them, etc.; Air-blasts, Volcanoes and Earthquakes, Theory of Ore Deposits, Origin of Coal, Petroleum, etc.; Occurrence of Alum and Nitrates; Occurrence of Antimony, Occurrence of Arsenic; Occurrence of Asbestos; Occurrence of Asphalts; Occurrence of Barite; Occurrence of Bismuth; Occurrence of Borax; Distribution of Building Stone; Occurrence of Cement Rock; Occurrence of Workable Clays; Occurrence of Coal and Lignites, Occurrence of Copper and Copper Ores; Occurrence of Diamonds, Diatomaceous Earths; Fuller's Earth Deposits; Occurrence of Feldspar; Occurrence of Fluorspar; Occurrence of Glass Sands, Occurrence of Gold; Occurrence of Graphite; Auriferous Gravels; Occurrence of Gypsum; Occurrence of Iron Ores; Occurrence of Lead and Zinc Ores; Occurrence of Manganese; Miscellaneous Materials; Occurrence of Rare Metals; Occurrence of Mica; Occurrence of Monazite; Occurrence of Natural Gas; Occurrence of Nickel; Other Deposits; Occurrence of Onyx, Sapphire, Emerald, Ruby, Turquoise, etc.; Occurrence of Peat, Occurrence of Petroleum; Occurrence of Phosphates; Occurrence of Platinum; Occurrence of Quicksilver, Occurrence of Rutile; Occurrence of Salt; Occurrence of Sulphur; Occurrence of Silver, Cobalt, etc., Occurrence of Tin; Occurrence of Tungsten; Occurrence of Wolframite.

HANDLING AND STORAGE OF MINERAL 293

Methods of Handling Mineral and Coal, Trimming and Mucking; Loading and Unloading Cars, Boats, etc.; Chutes for Loading Cars and Skips; Weighing Ore and Coal, Elevators; Storage of Coal and Mineral.

HAULAGE IN MINES 295

Tractive Force in Haulage; Haulage Systems; Animal Haulage, Haulage on Inclines; Steam Locomotives; Compressed Air Haulage, Gasoline Motors, Electrical Haulage; Mine Cars: Capacity, Design, Running-Gear, Wheels, etc.; Wheelbarrows; Sheaves, Couplings, Chps, etc.; Mine Roads, Tracks; Switches, Turnouts, Turntables, etc.

HOISTING IN MINING 299

Methods of Hoisting, Appliances, etc.; Calculations for Hoisting Engines; Speed of Hoisting; Electric Hoisting, Pneumatic Hoisting; Hoisting by Water Power; Gas and Oil Hoisting Engines; Deep Wind-ing; Counterbalancing in Hoisting; Overwinding and Its Prevention; Hoisting Buckets, Methods of Dumping, etc.; Windlasses and Whims for Hoisting; Cages for Hoisting, Skips for Raising Minerals; Brakes for Hoists, Drums and Sheaves, Indicators for Hoists; Shaft-Bottom Layouts; Safety Catches for Mine Cages; Ropes, Chains, Couplings, Guides, Cross-Heads, etc.; Cage Keeps, Chairs, etc.; Shaft-Closing Arrangements.

LABOR IN MINES 303

Mine Workmen and Labor Problems; Health of Miners; Apprenticeship in Mining; Labor Troubles, Strikes, etc.; Discipline in Mines;

CONTENTS

ix

PAGE

Workmen's Aid and Compensation and Insurance; Labor Unions; Miners' Wages; Miners' Clubs and Changing Houses; Contract Systems and Leasing; Ore Thefts.

LADDERS IN MINES..... 308

LIFE IN MINES 308

MANAGEMENT OF MINES..... 308

Mine Administration; The Engineer and Engineering Ethics; Mine Organization; Buying and Selling Ore; Mine Managers and Superintendents; Mine Accounts and Bookkeeping; System for Keeping Mining Notes: Filing and Card Systems, Amortization and Depreciation; Stock and Stockholders; Mine Investments; Mining Risks and Frauds; Rating and Taxation of Mining Property.

MAPS 312

Maps of Countries and Districts; Mine Maps; Geological Maps; Map Making.

METALLURGICAL METHODS AND PROCESSES 314

Metallurgical Processes, Theory, etc.; Metallurgical Works; Methods of Assaying, Calculations, etc.; Metallurgy of Copper; Blast Furnace Smelting of Copper; Pyritic Smelting of Copper; Reverberatory Smelting of Copper; Bessemerizing of Copper Matte; Refining of Copper; Electro-Metallurgy; Glass Making; Metallurgy of Gold and Silver; Smelting Gold and Silver; Cyaniding Processes, Theory, etc.; Cyaniding Plants; Chlorination Processes; Refining Gold and Silver; Metallurgy of Iron and Steel; Iron Blast Furnace Method, etc.; Electro-Metallurgy of Iron and Steel, Metallurgy of Lead; Metallurgy of Nickel and Cobalt; Metallurgy of Quicksilver; Metallurgy of Rare Metals; Roasting Ores, Roasting Furnaces, etc.; Smoke Problem: Flue Dust, Fume, Bog Houses, Chimneys, etc.; Metallurgy of Tin; Metallurgy of Zinc, Miscellaneous Information.

METALS 345

Iron: Its Alloys, etc., Aluminum and Its Properties; Copper, Mass Copper, etc., Gold and Silver: Properties, Fineness, etc.; Platinum; Quicksilver: Its Properties, etc.; Tin. Its Properties, etc.; Properties of Various Metals.

MINERALS 346

Mineral Determination and Classification; Value of Ore and Its Determination; Miscellaneous Mineral Occurrence; Measurement and Weight of Ore; Gold and Silver Ores and Minerals; Copper Ores and Minerals; Iron Ores, Minerals and Meteorites, Lead and Zinc Ores; Nickel Ores and Minerals; Salt, Quicksilver, Radium, Sulphur, Asbestos, Amber, Phosphates, etc.; Mica and Its Occurrence; Graphite; Corundum, Carborundum, etc.; Asphaltum Compounds, Origin, Properties and Occurrence of Diamonds; Gems and Precious Stones.

MILL AND MILL CONSTRUCTIONS 349

Design of Structures: Materials and Methods of Construction, Mine Buildings, Shops, etc.; Headframes: Wood and Metal Design;

Tipples: Methods of Construction and Materials; Ore Bins: Materials of Construction and Methods of Calculation; Foundations for Buildings and Mine Constructions; Flumes: Materials of Construction and Design; Tanks for Mining Purposes.

MINE GASES	352
Mine Atmosphere and Gases; Gases Resulting from Burning Explosives; Occurrence of Gases in Coal; Gas in Mines Other than Coal; Outbursts of Gas in Mines; Detection and Testing of Mine Gases; Mine Gases and Barometric Pressure; Estimation of Quantity of Gases.	
MINING LAW	355
Mining Law: Its Principles and Applications; Mining Law of the Various States and Countries; Mineral Land Acts and Federal Mining Laws, Extra-Lateral Rights and the Law of the Apex; Claims, Taxes, Assessments and Locations; Mining Leases; Tunnel Rights, Tunnel and Mill Sites, Riparian and Water Rights, Decisions; Mining Royalties	
MINE LIGHTING	358
Illumination of Mines and Buildings; Electricity for Mine Lighting; Acetylene Gas for Mine Lighting; Candles, etc.; Lighting Shafts; Safety Lamps and Testing by Safety Lamps.	
MINING	360
General, Bureau of Mines; Mine Reports; History of Mining; Inspection of Mines, Prospecting: Methods of Procedure, Equipping Camping Outfits, etc.; Drilling; Value of Mines; Sampling and Estimation of Mines; Ore Reserves, Ore in Sight, Mine Reports, etc.; Permanence in Depth; Development: Size, Shape, Depth and Methods of Mining Coal, Lignite, etc.; Room-and-Pillar Mining; Longwall Mining; Panel Mining; Drawing Pillars in Coal Mines; Break Down Coal at the Face; Rooms and Entries, etc.; Methods of Mining: General and Miscellaneous; Mining Thick and Massive Deposits; Caving Systems of Mining; Pocket Mining; Drift Mining; Methods of Stopping in Mines; Under-Sea Mining; Mining Frozen Gravels; Packing Mine Workings: Flushing Culm, Use of Waste; River Mining, Deep Mining; Beach Mining; Excavation of Earth; Rock and Ore, Use of Steam Shovels, Mechanical Excavators and Unloaders; Open-cut Mining, Milling Methods; Quarrying Methods; Hydraulic Mining: Methods and Appliances, Giants, Elevators, etc.; Dredging for Gold and Other Materials: Practice and Appliances; Mining Débris, Damages and Litigation; Reworking Abandoned Mines; Waste in Mining; Difficulties Encountered in Mining: High Temperatures, Increase of Temperature with Depth; Abandoned Mines and Districts; Salting of Mines.	
MINE AND MILL MACHINERY	388
Mining Machinery: Its Manufacture and Use; Pulleys and Belts; Bearings and Lubrication; Friction Clutches; Friction Brakes; Protection of Iron and Steel Structures; Mining Machinery at the Face; Electric Coal Mining Machines; Mechanical Mining Appliances: Getters.	

	PAGE
MINE SUPPORT.	390
<p>Mine Support: Conditions Affecting, etc ; Kinds of Support, Timber, etc.; Strength of Timber, Masonry, Coal and Iron for Mine Support, Subsidence in Mine Workings; Size of Pillars, Barrier Pillars, etc.; Methods of Timbering; Tunnel Support; Shaft Lining: Timbering, Tubbing, Cementation, etc.; Square-set Timbering; Preservation of Mine Timber and Structural Steel.</p>	
PHOTOGRAPHY FOR MINES AND TECHNICAL WORK.	396
POWER: STEAM, WATER, ELECTRICITY AND GAS...	396
<p>General Application of Power; Steam Boilers and Power Plants, Steam Engine Calculations, Tests and Horse-Power; Gas and Oil Engines: Horse-Power, Tests and Calculation of Boilers; Superheated and Wet Steam; Boiler Feed-Water; Condensers for Steam; Feed-Water Heaters for Boilers; Mechanical Feeders for Steam Boilers; The Central Power Plant; Steam Pipes and Coverings; Scale and Boiler Compounds; Consumption and Waste of Coal and Steam; Valves and Valve-Gear for Steam Engines; Water Power Plants: Theory and Practice; Water Wheels, Governors, Data, etc.; The Electric Power Plant and Its Equipment; Electricity in the Mine; Power Transmission: Electricity, Steam, Water and Miscellaneous</p>	
REDUCTION	401
<p>The Reduction of Ores: Methods and Practice; Automatic Feeders for Reducing Machinery, Crushers: Construction and Operation; Rolls: Construction and Operation; Stamp-Mill Practice; Fine Crushing by Mills. Ball, Tube and Miscellaneous Types.</p>	
ROPES FOR MINE USE	406
<p>Kinds of Wire Rope, Methods of Manufacture, etc.; Wire: Its Use and Manufacture, Paper and Fiber Ropes; Connections for Wire Ropes, Splicing, etc.; Strength of Ropes, Working Stresses, Examination and Tests; Care and Protection of Wire Rope; Breakage of Wire Rope</p>	
SAMPLING OF MINES...	407
<p>Mine Sampling; Methods of Sampling and Apparatus Employed; Sampling Coal and Ores; Sampling and Measurement of Ore Bodies; Practice in Sampling Minerals, Gravels, etc.</p>	
SIZING OF MINERAL	410
<p>Screens, Theory of Sizing; Kinds of Screens and Method of Operation.</p>	
SIGNALING IN MINES.	411
<p>Signal Codes for Mines; Methods of Signaling: Compressed Air, Electricity, Telephones, etc</p>	
SURVEYING	412
<p>Methods of Surveying; Surveying Instruments; Magnetic Surveys; Surface Surveys: Claims, etc.; Underground Surveys; Shaft-Plumbing.</p>	

TRANSPORTATION...	PAGE 414
Methods of Transportation; Portage, Packing and Fluming; Transportation by Rail; Capacity of Cars, Gauge, etc.; Rails, Rail-Sections, etc., Wagon Roads, Wagons and Traction Engines; River Transportation; Canal Transportation; Lake Transportation; Ocean Transportation; Cableways: Their Construction and Use.	
TUNNELING	417
Methods of Tunneling; Examples of Tunnels; Tunneling Machines.	
MINE VENTILATION	419
Methods of Ventilating Mines, Splitting Air-Currents, etc.; Mechanical Ventilators: Fans: Their Construction and Use; Effect of Size and Shape of Air Ways on Ventilation, etc.; Quantity of Air Needed in Mines; Stopping, Doors and Regulators in Mines; Measurements of Air Currents; Tests on Fans; Efficiency of Fans; Application of Ventilating Methods to Metal and Coal Mines.	
WATER.	421
Source and Supply of Water; Measurement of Water; Pollution and Purification of Waters; Water in Milling.	

PUBLICATIONS INDEXED AND ABBREVIATIONS

JOURNALS, TRANSACTIONS AND PROCEEDINGS OF SOCIETIES

- Am Jour. Min. — American Journal of Mining.
 Coll. Engr — Colliery Engineer
 Coll Engr. & Met. Miner. — Colliery Engineer and Metal Miner.
 Engineering, London.
 E & M. J. — Engineering and Mining Journal.
 J C M. I. — Journal of the Canadian Mining Institute
 J. C. & M. Soc. S. A. — Journal of the Chemical and Metallurgical Society
 of South Africa.
 J. W. Soc. E. — Journal of the Western Society of Engineers.
 J M. Soc. N. S. — Journal of the Mining Society of Nova Scotia.
 Min. Mag. (old series). — Mining Magazine.
 Min Mag. (new series). — Mining Magazine.
 Min Mag., London. — Mining Magazine, London.
 M. & M. — Mines and Minerals.
 Min & Sci. Press. — Mining and Scientific Press.
 P. C. M. & M. Soc. S. A — Proceedings of the Chemical, Mining and Met-
 allurgical Society of South Africa
 P. E. Soc. W. Pa. — Proceedings of the Engineering Society of Western
 Pennsylvania.
 P. Soc. P. E. E. — Proceedings of the Society for the Promotion of Engi-
 neering Education.
 Sch. Mines Quart. — School of Mines Quarterly.
 T. A. I. M. E — Transactions of the American Institute of Mining Engineers.
 T Au I. M E. — Transactions of the Australian Institute of Mining
 Engineers
 T I M E. — Transactions of the Institution of Mining Engineers.
 T. I. M. & M. — Transactions of the Institute of Mining and Metallurgy.
 T L S. M. I. — Transactions of the Lake Superior Mining Institute
 T N. S. I. M. & M. E — Transactions of the North Staffordshire Institute
 of Mining and Mechanical Engineers.
 T. F. C. M. I. — Transactions of the Federated Canadian Mining Institute.
 U. S. G. S. Publications. — United States Geological Survey Publications,
 except Water Supply Papers.

PUBLICATIONS INCOMPLETELY INDEXED

Reports of Surveys, Proceedings of Societies, etc.

- Ann. Min. Rept. N. S. Wales. — Annual Mining Report of New South
 Wales.
 Cal. Miners' Assoc. Ann. — California Miners' Association Annual.
 Columbia Engr. — Columbia Engineer.
 P. I. C. E — Proceedings of the Institute of Civil Engineers.

- Rept. Census Office, Mines and Quarries. — Report Census Office, Mines and Quarries.
 Rept. Insp. Mines Pa — Report of the Inspector of Mines of Pennsylvania.
 Rept. Zinc Comm. Canada — Report of the Commission Appointed to Investigate the Zinc Resources of British Columbia, etc.
 Second Geol. Sur. Pa — Second Geological Survey of Pennsylvania.
 The Mines of the West. — Raymond.
 The Univ. Geol. Surv. of Kans. — The University Geological Survey of Kansas.
 Univ of Ill Bull. — University of Illinois Bulletin.
 U. S. Bureau of Mines. — United States Bureau of Mines.

JOURNALS

- Am Engr. & R R Jour — American Engineer and Railroad Journal.
 Coll Guard. — Colliery Guardian, London.
 Concrete and Constructional Engineering, London.
 Electrochemical Industry
 Eng. Mag. — Engineering Magazine.
 Eng. News — Engineering News.
 Eng -Cont. — Engineering Contracting.
 Mining World.

BOOKS

- Anthracite Coal Industry, Roberts
 Aerial or Wire Rope Tramways, Willis-Taylor.
 Coll. Working and Management, Bulman and Redymayne.
 Diamond Drilling, Denny
 Earthwork and Its Cost, Gillette.
 Gold Min. & Mill. W. Aus. — Gold Mining and Milling Western Australia, Charleton.
 Kents' Mech. Engrs. Pocket-Book — Kents' Mechanical Engineers' Pocket-Book.
 Mech. Eng. of Coll. — Mechanical Engineering of Collieries, Futers.
 Mine Building Construction.
 Miners Pocket-Book, Lock.
 Ore Dressing, Richards.
 P. C. M. — Practical Coal Mining, Ed. W. S. Boulton.
 R.R. Construction. — Railroad Construction, Webb.
 Sci. Am. Supp. — Scientific American Supplement.
 The Gold Mines of the Rand, Hatch and Chalmers.
 The Witwatersrand Goldfields, Truscott.
 The Mechanical Handling of Material, Jimmer.
 Tin Deposits of the World.
 Tunneling, Prelini.
 Well-Boring, Isler.

INDEX OF MINING ENGINEERING LITERATURE

ACCIDENTS IN MINING

NOTES ON RECENT MINE DISASTERS. By James Ashworth. E. & M J., vol. 86, p. 332. 3½ columns.

COLLIERY DISASTERS. By F A. Hill. E. & M. J., vol. 86, p. 18. 2 columns.

See also COAL DUST AS AN EXPLOSIVE, MINE FIRES, AND MINE EXPLOSIONS.

MINE ACCIDENTS. By J. T. Quine. T. L S. M. I., vol. 14, p 71. 10½ pages.

MINE ACCIDENTS By S. Reynolds. M. & M., vol. 29, p. 412. 3 columns

ACCIDENTS IN STOPES. E & M. J., vol. 87, p. 300. ¼ column.

MINING ACCIDENTS IN CORNWALL. Min. Mag., London, vol 1, p. 119 6 columns. I.

ACCIDENTS IN THE COAL MINES OF GREAT BRITAIN. E & M. J., vol. 89, p. 975. 4 columns.

COAL-MINE ACCIDENTS IN GREAT BRITAIN. E. & M. J., vol. 89, p 1029. 2 columns.

COAL-MINING ACCIDENTS IN 1907. M. & M., vol. 29, p 326. ¼ column

METAL-MINING FATALITIES IN IDAHO, FOR 1910. M. & M., vol. 31, p. 700. 1 column.

COAL-MINE DISASTERS IN NORTH AMERICA FROM 1869 TO 1910. E & M. J., vol. 90, p. 949. Table

MINE-ACCIDENT INVESTIGATIONS. By G. S. Rice. M. & M., vol 31, p. 282. 6 columns.

MINE-ACCIDENT INVESTIGATION OF THE UNITED STATES GEOLOGICAL SURVEY. By G. S. Rice. J. W. Soc. E., vol. 14, p. 784. 37 pages. I.

MINE ACCIDENTS AND THE BUREAU OF MINES. By G S Rice. Min & Sci. Press, vol. 101, p. 471. 5 columns.

See also BUREAU OF MINES under MINING.

ECONOMY AS RELATED TO MINE ACCIDENTS. By H. E. Coll E. & M. J., vol. 87, p. 359. 8 columns.

LEGISLATION ON ACCIDENTS Min. & Sci. Press, vol. 20, p. 33. ¼ column.

COAL TRUSTS AND SAFE MINING (?). By W. H. Reynolds. M. & M., vol. 31, p 633. 5 columns

RESULTS OF INQUIRIES INTO RECENT MINE DISASTERS. By F. W. Parsons E. & M. J., vol. 85, p. 259. 14 columns. I.

Loss of Life in Mining

DEATH FROM ACCIDENTS IN MINES. P. C. M. & M. Soc. S. A., vol 7, p. 171. 5 columns.

FATAL ACCIDENTS IN COAL MINES. By F. L. Hoffman. E. & M J., vol. 85, p. 34. 8½ columns.

FATAL ACCIDENTS IN COAL MINES OF AMERICA. By F. L. Hoffman. E. & M. J., vol 86, p. 1207. 12½ columns.

FATAL ACCIDENTS IN COAL MINES OF NORTH AMERICA. By F. L. Hoffman E. & M. J., vol. 88, p 1253. 10 columns.

FATAL ACCIDENTS IN AMERICAN METAL MINES. By F. L. Hoffman. E & M. J., vol. 89, p. 511. 7 columns.

FATAL ACCIDENTS IN THE COAL MINES OF NORTH AMERICA By F L Hoffman. E & M. J., vol 90, p. 1313. 9½ columns.

DATA ON MORTALITY AND MORBIDITY OF MINERS By F. L. Hoffman. E & M. J., vol 89, p. 1321, 9½ columns; vol 90, p 23. 10 columns.

COAL-MINING FATALITIES IN BELGIUM By F L Hoffman E. & M. J., vol. 90, p 519 5½ columns. D

Cause of Accidents

COAL-MINE ACCIDENTS Their Causes and Prevention By C. Hall and W. O. Snelling U. S. G. S., Bull. 333, 21 pages, 1907.

CAUSE OF ACCIDENTS M. & M., vol 31, p 410. 4 columns.

CAUSES OF ACCIDENTS IN RAND MINES Min. & Sci. Press, vol. 97, p. 193. ½ column

CAUSE OF MINE EXPLOSIONS. By James Ashworth. Colliery Engineer, vol. 16, p. 127.

INSTANTANEOUS OUTBURSTS OF GAS IN SHAFT SINKING. E. & M. J., vol. 88, p 1271 1½ columns.

See also OCCURRENCE OF GASES IN COAL MINES.

ACCIDENTS TO MULE DRIVERS. M. & M., vol. 29, p. 288 ½ column.

ACCIDENTS FROM THE DRAWING OF PROPS E. & M. J., vol 87, p. 359. 1½ columns.

FATALITIES FROM ROBBING PILLARS. E. & M. J., vol. 87, p. 19. 2 columns.

See also DRAWING OF ROBBING PILLARS.

ACCIDENTS FROM EXPLOSIVES. T. L. S. M. I., vol. 14, p 75. 3 pages

ACCIDENTS WITH EXPLOSIVES. E. & M. J., vol 87, p 299. 1 column.

ACCIDENTS FROM USE OF EXPLOSIVES. By J. W Stark. M. & M., vol. 29, p. 381. 4½ columns.

ACCIDENTS IN LOADING AND FIRING EXPLOSIVES M. & M., vol. 29, p. 382 2 columns

See also METHODS OF FIRING EXPLOSIVES AND TAMPING and TAMPING MATERIALS

EXPLOSIVES AND MINING ACCIDENTS. T. Au. I M. E., vol. 9, p 31, 5 pages; p. 42 10 pages

COMMON CAUSES OF ACCIDENTS FROM EXPLOSIVES IN MINES By J R. Godfrey. T. Au. I M E, vol. 9, p 30. 32 pages.

ACCIDENTS DUE TO FLAMING EXPLOSIVES E. & M. J., vol. 87, p. 300 1 column

ACCIDENTS CAUSED BY MISSED HOLES. E. & M J., vol. 87, p. 299. 1 column.

See also METHODS OF FIRING EXPLOSIVES.

ACCIDENTS IN TRANSPORTING EXPLOSIVES M. & M., vol. 29, p. 381. 1½ columns

See also HANDLING EXPLOSIVES.

ACCIDENTS IN STORING EXPLOSIVES. M & M., vol. 29, p. 381. 1½ columns.

See also BLASTING IN MINES AND EXPLOSIVES FOR MINING PURPOSES

DANGERS ATTENDING USE OF ELECTRICITY IN COAL MINES. By J. Ashworth E & M. J., vol. 88, p. 123. 2½ columns.

ELECTRIC SHOCKS AND FIRES IN MINES. E & M. J., vol. 87, p. 317. 1½ columns.

ELECTRIC SHOCKS IN MINES. By I. F. Walker. M & M., vol. 31, p. 493, 3½ columns; p. 543, 3 columns; p. 637. 4 columns.

DEATH FROM ELECTRIC SHOCK AT CLIFTON COLLIERY, ENGLAND. By S. F. Walker. E & M. J., vol. 88, p. 779. 3 columns. I.

AN ACCIDENT CAUSED BY AN ELECTRIC COAL CUTTER. E & M. J., vol. 88, p. 452. 2 columns. I.

- CARELESSNESS WITH ELECTRICITY.** E. & M. J., vol. 90, p. 726. 1½ columns.
- SAFE USE OF ELECTRICITY IN GASEOUS MINES.** M. & M., vol. 31, p. 126. 1 column.
- See also **ELECTRICITY IN THE MINE.**
- PECULIAR MINE ACCIDENT. A Fire Resulting from Substituting Crude Petroleum for Car Lubricating Oil.** By J. Elliott. M. & M., vol. 29, p. 488. 1½ columns.
- DANGEROUS GASES CAUSING MINE ACCIDENTS.** T. Au. I. M. E., vol. 9, p. 37. 2 pages.
- See also **MINE EXPLOSIONS AND MINE GASES.**
- CARELESSNESS IN MINING: Cause of Accidents** E. & M. J., vol. 89, p. 526. ½ column.
- CARELESSNESS IN MINES CAUSE OF ACCIDENTS.** M. & M., vol. 30, p. 355. ½ column.
- COAL-MINE ACCIDENTS ARE DUE TO VIOLATIONS OF MINE LAWS.** E. & M. J., vol. 88, p. 1176. 1½ columns.
- MINE ACCIDENTS DUE TO DISREGARD OF LAW.** E. & M. J., vol. 89, p. 578. 1 column.
- THE RESPONSIBILITY FOR RECENT COAL-MINE DISASTERS.** E. & M. J., vol. 85, p. 969. 3½ columns.
- ACCIDENTS DUE TO LAX DISCIPLINE.** E. & M. J., vol. 90, p. 1044. ½ column.
- See also **DISCIPLINE IN MINES.**
- Protection in Mining**
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By J. A. Holmes. Min. & Sci. Press, vol. 100, p. 673. 3 columns.
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By Dr. J. A. Holmes. Eng. News, Dec. 9, 1909.
- CAUSE AND PREVENTION OF EXPLOSIONS.** Colliery Guardian, vol. 59, p. 326.
- MINE-ACCIDENT PREVENTION.** By J. J. Rutledge. M. & M., vol. 31, p. 276. 4½ columns.
- A CHECK SYSTEM FOR GASEOUS MINES.** By O. Cartledge. M. & M., vol. 30, p. 331. 1 column.
- See also **MINE ATMOSPHERE AND GASES.**
- PRECAUTIONARY SUGGESTIONS TO ALABAMA COAL MINERS: Regarding Accidents.** E. & M. J., vol. 89, p. 478. 2 columns.
- PREVENTION OF ACCIDENTS.** M. & M., vol. 31, p. 412. 1 column.
- PREVENTION OF ACCIDENTS IN MINING.** T. L. S. M. I., vol. 14, p. 93. 1 page.
- PREVENTION OF ACCIDENTS IN METAL MINES.** By C. T. Rice. E. & M. J., vol. 87, p. 298. 14½ columns.
- PREVENTION OF MINE ACCIDENTS.** Min. & Sci. Press, vol. 97, p. 881. 1½ columns.
- THE PREVENTION OF ACCIDENTS IN COAL MINING** By E. H. Cox. E. & M. J., vol. 88, p. 410. 9½ columns.
- COAL-MINE ACCIDENTS AND THEIR PREVENTION.** By J. A. Holmes. E. & M. J., vol. 88, p. 1228. 2½ columns.
- PREVENTION OF COAL-MINE ACCIDENTS** M. & M., vol. 30, p. 308. 5½ columns.
- PREVENTION OF COAL-MINE ACCIDENTS.** By J. A. Holmes. M. & M., vol. 30, p. 329. 1½ columns.
- PREVENTION OF MINE ACCIDENTS.** By J. Mitchell. M. & M., vol. 30, p. 346. ½ column.
- THE PREVENTION OF MINE ACCIDENTS.** By R. H. Coulson. E. & M. J., vol. 90, p. 1043. 3 columns.
- PREVENTION OF MINE ACCIDENTS.** E. & M. J., vol. 86, p. 1088. 21 columns.
- ACCIDENTS: Preventative Measures.** P. C. M. & M. Soc. S. A., vol. 9, p. 247. 1½ columns.

SAFETY MEASURES IN MINING. By Donald Macaulay and L. G. Irvine. P. C. M. & M. Soc. S. A., vol. 6, p. 148, 17 columns; p. 197, 3 columns; p. 226, 4 columns; p. 251, 4 columns; p. 292, 32½ columns; p. 336, 5½ columns; p. 369, 1 column; vol. 7, p. 10, 3½ columns; p. 36, 15 columns; p. 76, 14 columns; p. 111, 18 columns; p. 159, 32 columns

TO PREVENT BLOWN-OUT SHOTS. P. C. M. & M. Soc. S. A., vol. 9, p. 319. 2 columns.

See also **BLASTING IN MINES**

HOW EUROPEAN COLLIERIES ARE SAFEGUARDED. E. & M. J., vol. 89, p. 829. 7½ columns.

AUTOMATIC PROTECTIVE SWITCH GEAR FOR COLLIERY SERVICE. By E. B. Wedmore. T. I. M. E., vol. 38, p. 416. 14 pages. I.

THE BENNETT SAFETY GEAR. By S. G. Bennett. T. I. M. E., vol. 38, p. 647. 6 pages. I.

WHITE WASHING A COAL MINE. By S. Reynolds. M. & M., vol. 30, p. 16. 2 columns

LEVYING OF A FINE FOR EVERY FATAL ACCIDENT. E. & M. J., vol. 87, p. 300. 1 column.

TESTING ROOFS IN MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 48. ½ column.

See also **FALLS OF ROOF AND WALLS IN MINES.**

GOOD TIMBERING AND DEATH RATE. P. C. M. & M. Soc. S. A., vol. 8, p. 133. ½ column.

See also **MINE SUPPORT.**

SAFE USE OF ELECTRICITY IN COAL MINING. By G. R. Wood. E. & M. J., vol. 88, p. 19. 7½ columns.

ELECTRIC SHOCKS IN COAL MINES. By S. F. Walker. E. & M. J., vol. 90, p. 725. 15 columns.

See also **CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.**

PREVENTION OF SHOCKS IN COAL MINES. E. & M. J., vol. 90, p. 728. ¾ column.

AUTOMATIC FIRE PROTECTION. By W. A. Neracher. P. E. Soc. W. Pa., vol. 24, p. 321. 17 pages.

MEANS OF PREVENTING MINE FIRES. M. & M., vol. 31, p. 274. 1 column.

See also **MINE FIRES.**

ON SAFETY APPLIANCES AND PRECAUTIONS NECESSARY IN MINES. By J. R. Godfrey. T. A. I. M. E., vol. 6, p. 1. 33 pages. I.

THE PREVENTION OF MINE ACCIDENTS: Report of Committee to American Mining Congress. E. & M. J., vol. 90, p. 601. 19 columns.

SAFETY IN MINES AND MILLS. E. & M. J., vol. 90, p. 11. 2 columns.

SAFETY PRECAUTIONS IN ALABAMA COAL MINES. E. & M. J., vol. 88, p. 780. 1 column.

SAFETY PRECAUTIONS IN ALABAMA COAL MINES. By E. H. Cox. E. & M. J., vol. 89, p. 1165. 9½ columns. I.

SAFETY APPLIANCES IN GERMAN MINES. By R. W. Voigt. M. & M., vol. 30, p. 460. 3 columns. I.

See also **SAFETY CATCHES FOR MINE CAGES AND SHAFT-CLOSING ARRANGEMENTS.**

See also **OVERWINDING AND ITS PREVENTION, AND SAFETY CATCHES FOR MINE CAGES**

See also **MINE SUPPORT: Conditions Affecting.**

See also **COST OF DAMS, etc.**

Rescue Work in Mines

RESCUE WORK IN MINES. Min. & Sci. Press, vol. 98, p. 349. 2 columns. I.

MINE RESCUE WORK. Min. & Sci. Press, vol. 101, p. 81. 7 columns. I.

RESCUE WORK IN MINES. P. C. M. & M. Soc. S. A., vol. 7, p. 100. 1½ columns.

RESCUE WORK AT HAMSTEAD COLLIERY. By D. J. Pierce. E. & M. J., vol. 86, p. 5. 1½ columns. I.

- RESCUE WORK AFTER MINE EXPLOSIONS.** E. & M. J., vol. 90, p. 82. 3½ columns.
- RESCUE WORK AT THE ST. PAUL MINE, CHERRY, ILLINOIS.** E. & M. J., vol. 88, p. 1073. 1½ columns
- THE POSSIBILITIES OF RESCUE WORK IN CONNECTION WITH MINE EXPLOSIONS AND FIRES.** By J. S. Hal-dane. T. I. M. E., vol. 39, p. 458. 27 pages. I.
- RESCUING THE MEN ENTOMBED AT ALPHA SHAFT NEAR ELY, NEVADA.** By E. W. Walter. E. & M. J., vol. 85, p. 407. 3½ columns.
- TO AVOID RESCUE WORK.** M. & M., vol. 30, p. 593. 1 column.
- PROVISIONS FOR MINE RESCUE IN BRITISH COLUMBIA.** E & M. J., vol. 90, p. 201. 1 column.
- COLLIERY RESCUE BRIGADES IN GREAT BRITAIN.** M. & M., vol. 31, p. 667. ½ column.
- SUGGESTIONS FOR THE ORGANIZATION OF COLLIERY RESCUE BRIGADES.** By Sgt. A. T. Winborn. T. I. M. E., vol. 37, p. 81, 19 pages. I.; p. 294, 20 pages.
- THE AEROLITH RESCUE APPARATUS** M. & M., vol. 31, p. 521. 3½ columns. I.
- A NEW BREATHING APPARATUS.** M. & M., vol. 31, p. 759. 2½ columns. I.
- TISSOT BREATHING APPARATUS FOR RESCUE WORK.** By H. Briggs. E. & M. J., vol. 89, p. 1027. 7½ columns. I.
- AEROLITH BREATHING APPARATUS.** By Alfred Gradenwitz. E. & M. J., vol. 85, p. 105. 2 columns. I.
- THE WEG BREATHING APPARATUS.** E. & M. J., vol. 85, p. 366. 2 columns. I.
- BREATHING APPLIANCES FOR MINES.** P. C. M. & M. Soc. S. A., vol. 8, p. 65. 2 columns.
- ROYAL COMMISSION ON MINES AND BREATHING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 8, p. 94. 3 columns.
- POINTS IN BREATHING APPARATUS.** P. C. M. & M. Soc. S. A., vol. 8, p. 397. ½ column.
- REQUIREMENTS OF A BREATHING APPARATUS FOR USE IN MINES.** By W. E. Mingramm. T. A. I. M. E., vol. 39, p. 341. 9½ pages. I.
- THE USE OF BREATHING APPARATUS AT A MINE FIRE IN CAPE BRETON, WITH SOME NOTES ON THE CENTRAL RESCUE STATION OF THE DOMINION COAL COMPANY, LIMITED, AT GLACE BAY, CAPE BRETON, NOVA SCOTIA.** By F. W. Gray and James McMahon. T. I. M. E., vol. 37, p. 100. 18 pages.
- BREATHING APPARATUS FOR USE IN MINES: DISCUSSION.** T. I. M. E., vol. 36, p. 53. 3 pages.
- RESPIRATION DEVICES FOR MINES: The Artificial Regeneration of Air for Respiration in Life-Saving Apparatus for Mining Service.** P. C. M. & M. Soc. S. A., vol. 5, p. 191. 2 columns.
- SELF-CONTAINED RESPIRATING APPARATUS IN MINES.** By A. E. Davidson. M. & M., vol. 29, p. 118. ½ column.
- OXYGEN HELMETS USED AT MINE FIRES.** By O. Callidge. M & M., vol. 30, p. 712. 1 column.
- OXYGEN HELMETS USED AT MINE FIRE.** By T. A. Carraher. M. & M., vol. 31, p. 161. 1½ columns. I.
- LIQUID OXYGEN FOR RESCUE WORK IN COAL MINES.** By A. Gradenwitz. E. & M. J., vol. 88, p. 923. 4½ columns. I.
- TESTS OF LIFE-SAVING APPLIANCES FOR MINES.** By R. Grimshaw. E. & M. J., vol. 87, p. 1192. 2 columns.
- RESCUE APPARATUS IN AUSTRIAN MINES.** E. & M. J., vol. 87, p. 414. ½ column.
- RESCUE APPARATUS FOR MINES.** E. & M. J., vol. 86, p. 8. 1½ columns.
- RESCUE APPARATUS IN COAL MINES.** By W. E. Mingramm. E. & M. J., vol. 85, p. 900. 5 columns. I.

RESCUE APPARATUS FOR USE IN COAL MINES P. C. M. & M. Soc. S. A., vol. 8, p. 160. 2½ columns.

RESCUE APPLIANCES: Lessons from Glencoe. By H. Kestner. P. C. M. and M. Soc. S. A., vol. 8, p. 306, 11 columns, I.; p. 385, 1 column, vol. 9, p. 21, ½ column; p. 41, 8½ columns, I.

ON THE PRACTICAL USE AND VALUE OF COLLIERY RESCUE: Apparatus, and the Organization of Rescue Corps. By Geo. B. Walker. T. I. M. E., vol. 36, p. 536. 19 pages.

DREGER LIFE-SAVING APPARATUS IN A MINE FIRE. Min. & Sci. Press, vol. 97, p. 401. ¾ column.

A NEW SMOKE HELMET FOR MINE-FIRE FIGHTING. M. & M., vol. 31, p. 281 ½ column. I.

THE ANACONDA FIRE HOOD By R. N. Bell. M. & M., vol. 29, p. 175. 2 columns. I.

See also **MINE FIRES.**

THE ANACONDA PROTECTIVE HOOD. By R. N. Bell. E. & M. J., vol. 86, p. 708. 2 columns. I.

REGENERATION OF AIR FOR SUBMARINES WITH FUSED SODIUM PEROXIDE P. C. M. & M. Soc. S. A., vol. 7, p. 51. 1 column.

EUROPEAN LAWS REGARDING BREATHING APPARATUS. M. & M., vol. 31, p. 413. ½ column.

COAL COMPANIES ESTABLISH RESCUE STATIONS. E. & M. J., vol. 87, p. 951. 2 columns.

MINE RESCUE LABORATORY. By R. Y. Williams. M. & M., vol. 29, p. 537 2 columns. I.

AN ENGLISH RESCUE STATION. M. & M., vol. 29, p. 100. 3 columns. I.

MINE RESCUE STATIONS AND MINE ACCIDENTS E. & M. J., vol. 89, p. 281. 4 columns.

RESCUE STATION AT LEISENRING No. 1. By C. B. Franks. M. & M., vol. 30, p. 599. 2½ columns.

RESCUE STATIONS IN ILLINOIS. By R. Y. Williams. M. & M., vol. 31, p. 214. 5 columns. I.

MINE RESCUE STATIONS IN ILLINOIS. By R. Y. Williams. E. & M. J., vol. 90, p. 176. 7½ columns I.

RESCUE STATIONS IN ILLINOIS COAL-MINING LOCALITIES. By R. Y. Williams. J. W. Soc. E., vol. 15, p. 655 23½ pages I.

See also **PROTECTION IN MINING.**

Compensation for Injuries

MINER'S ACCIDENT RELIEF FUND. E. & M. J., vol. 90, p. 25. ¾ column.

COMPENSATION TO WORKERS FOR ACCIDENTAL INJURIES. By M. M. Duncan. E. & M. J., vol. 88, p. 519. 4½ columns.

COMPENSATION FOR INDUSTRIAL ACCIDENTS By D. Ross. Min. & Sci. Press, vol. 101, p. 744. 5½ columns.

COMPENSATION TO WORKMEN IN CASE OF INJURIES. By M. M. Duncan. T. L. S. M. I., vol. 14, p. 47. 6 pages.

COMPENSATION FOR INJURY. By R. P. Tarr. M. & M., vol. 31, p. 410. 6½ columns.

TAX FOR COMPENSATION TO INJURED. P. C. M. & M. Soc. S. A., vol. 9, p. 246. Note.

See also **WORKMAN'S AID, COMPENSATION AND INSURANCE.**

MINER'S BENEFIT FUND E. & M. J., vol. 90, p. 1013. ½ column.

HOMESTAKE AID FUND. E. & M. J., vol. 90, p. 309. 1½ columns

INSURANCE AND MINE ACCIDENTS. By G. W. Traer. Min. & Sci. Press, vol. 99, p. 717. 2 columns.

ACCIDENT LIABILITY AND COMPENSATION. E. & M. J., vol. 90, p. 23. 1½ columns

INDUSTRIAL ACCIDENTS AND EMPLOYEES LIABILITY LAWS. By D. Ross. Min. & Sci. Press, vol. 99, p. 716. 2½ columns.

LIABILITY FOR INDUSTRIAL ACCIDENTS.

By Sion B. Smith. M. & M., vol. 31, p. 501. 5 columns.

POSSIBILITIES OF A NEW LIABILITY LAW. By S. Reynolds. M. & M., vol. 31, p. 532. 7½ columns.

See also **WORKMEN'S AID, COMPENSATION AND INSURANCE.**

First Aid in Mining Accidents

FIRST AID TO THE INJURED IN COAL MINES. By M. J. Shields. Coal Mining Supplement, E. & M. J., vol. 88, p. 42. 8 columns I.

FIRST AID FOR INJURED SPINES. By T. C. Harvey. M. & M., vol. 31, p. 538. 1½ columns. I.

SUGGESTIONS FOR ORGANIZED UNDERGROUND AMBULANCE WORK. T. I. M. E., vol. 37, pp. 42-44, 218-223.

FIRST-AID CORPS IN ALABAMA COAL MINES E. & M. J., vol. 89, p. 1166. ½ column.

WILL FIRST AID CORPS LAST? M. & M., vol. 29, p. 407. 1 column.

ORGANIZATION OF FIRST-AID CORPS. By M. J. Shields M. & M., vol. 29, p. 379. 3½ columns

FIRST-AID WORK IN NEW SOUTH WALES. M. & M., vol. 30, p. 366. ½ column.

THE FIRST AID MOVEMENT. By H. H. Stock. M. & M., vol. 29, p. 243. 11 columns. I.

FIRST-AID WORK AT COAL MINES. By J. H. Ketner. M. & M., vol. 31, p. 490. 2 columns. I.

METHODS OF RESUSCITATION P. C. M. & M. Soc. S. A., vol. 10, p. 303. 2 columns.

RESUSCITATION AFTER ELECTRIC SHOCK. M. & M., vol. 30, p. 91. 1½ columns.

See also **CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.**

APPARATUS FOR CONVEYING WOUNDED MEN FROM STOPES. E. & M. J., vol. 89, p. 1263. 1 column. I.

See also **HEALTH OF MINERS.**

FIRST-AID CONTEST AT INKERMANN. M. & M., vol. 30, p. 225. 3 columns. I.

FIRST-AID CONTEST. By C. A. Graves. M. & M., vol. 29, p. 172. 2 columns. I.

FIRST-AID CONTESTS. M. & M., vol. 31, p. 197. 8½ columns I.

READING FIRST-AID FIELD DAY. By H. H. Stock. M. & M., vol. 30, p. 121. 4 columns. I.

See also **PROTECTION IN MINING.**

Falls of Roof and Walls in Mines

FALLS IN SHAFTS: Shaft Accidents. By F. H. Wynne. T. I. M. E., vol. 38, p. 653. 18 pages.

FALL OF LABORER DOWN THE RED JACKET SHAFT. E. & M. J., vol. 90, p. 749. Note.

WARRIOR RUN MINE ACCIDENT. M. & M., vol. 29, p. 121. 2 columns I.

ACCIDENTS CAUSED BY FALL OF ROCK AND COAL. E. & M. J., vol. 88, p. 412. ½ column.

ACCIDENTS CAUSED BY FALLING ROCK IN METAL MINES. E. & M. J., vol. 87, p. 301. 1½ columns

SUMMARY OF THE "REPORT OF A COMMITTEE APPOINTED BY THE ROYAL COMMISSION ON MINES TO INQUIRE INTO THE CAUSES OF AND MEANS OF PREVENTING ACCIDENTS FROM FALLS OF GROUND, UNDERGROUND HAULAGE, AND IN SHAFTS: Shaft Accidents. By F. H. Wynne. T. I. M. E., vol. 38, p. 653. 18 pages.

SUMMARY OF THE "REPORT OF A COMMITTEE APPOINTED BY THE ROYAL COMMISSION ON MINES TO INQUIRE INTO THE CAUSES OF AND MEANS OF PREVENTING ACCIDENTS FROM FALLS OF GROUND, UNDERGROUND HAULAGE, AND IN SHAFTS," Part II: Falls of Roof and Sides. By W. Charlton and F. H. Wynne. T. I. M. E., vol. 39, p. 378. 20 pages.

THE ALPHA SHAFT DISASTER. By W. S. Larsh. M. & M., vol. 29, p. 104. 4 columns. I

See also **SUBSIDENCE IN MINE WORKINGS.**

See also **CAUSE OF ACCIDENTS.**

Inundation in Mines

DANGER OF INRUSHES OF SURFACE WATER. E. & M. J., vol. 90, p. 973. 4½ columns. I

TAPPING MINE WATER UNDER GREAT PRESSURE By Robert Sibley. E. & M. J., vol. 85, p. 562. 9½ columns. I

FLOOD DAMAGE AT THE GREAT FALLS SMELTER, MONTANA. By F. S. Shewell. Min. & Sci. Press, vol. 97, p. 57. 2½ columns. I.

THE MONTEREY FLOOD AND SAN LUISITO BRIDGE. By S. J. Lewis. Min. & Sci. Press, vol. 99, p. 494. 4½ columns. I.

RECLAIMING A FLOODED GYPSUM MINE. By E. H. Fishack. E. & M. J., vol. 85, p. 1098. 3 columns. I.

DIVERS IN MINING. P. C. M. & M. Soc. S. A., vol. 7, p. 57. 2½ columns; The Engineer, June 1, 1906, p. 373.

See also **CAUSE OF ACCIDENTS.**

See also **COST OF DAMS, etc.**

Coal Dust as an Explosive Agent

DUST IN MINES. Colliery Engineer, vol. 10, p. 152; vol. 12, pp. 113, 196, 268; vol. 13, pp. 6, 151.

THE BAROMETRIC AND TEMPERATURE CONDITIONS AT THE TIME OF DUST EXPLOSIONS IN THE APPALACHIAN COAL MINES. By N. H. Mannakee. T. A. I. M. E., vol. 40, p. 655. 12 pages.

See also **MINE GASES, AND BAROMETRIC PRESSURE**

DUST EXPLOSIONS IN COAL MINES. By F. Bache. T. A. I. M. E., vol. 40, p. 667, 6 pages; Discussion, p. 907, 2½ pages.

DUST EXPLOSION AT THE GARDANNE MINE, FRANCE. T. I. M. E., vol. 37, p. 696. 2 pages.

EXPLOSIONS FROM COAL DUST IN ENGLISH MINES. By James Stead. Mining World, June 18, 1910

COAL-DUST AND COLLIERY EXPLOSIONS. Colliery Engineer, vol. 9, p. 80.

COAL DUST A CAUSE OF COLLIERY EXPLOSIONS. Colliery Engineer, vol. 8, p. 83

ANOTHER EXPLOSION IN WHICH COAL DUST WAS AN IMPORTANT ELEMENT. Colliery Engineer, vol. 9, p. 209.

COAL-DUST EXPLOSIONS. Their Origin and Extension. By John Verner. Coll. Engr. & Met. Miner, vol. 17, p. 26.

DUST AS A FACTOR IN MINE EXPLOSIONS. E. & M. J., vol. 87, p. 14. 1 column.

COAL DUST AS A FACTOR IN MINE EXPLOSIONS. By H. M. Payne. E. & M. J., vol. 86, p. 9. 16½ columns. D.

DUST AS A FACTOR IN MINE EXPLOSIONS. By W. N. Page. E. & M. J., vol. 86, p. 1107. 3½ columns.

CAUSES OF COAL-DUST EXPLOSIONS. E. & M. J., vol. 85, p. 1188. ½ column.

See also **CAUSE OF ACCIDENTS**

COAL DUST WILL EXPLODE WITHOUT THE PRESENCE OF GAS. E. & M. J., vol. 88, p. 1227. 1½ columns.

CHEMISTRY OF A COAL-DUST EXPLOSION. By Donald W. D. Stuart. Colliery Guardian, Mar 18, 1898. p. 494

CHEMISTRY OF COAL-DUST EXPLOSIONS. M. & M., vol. 31, p. 264. 5 columns.

BRITISH COAL-DUST EXPERIMENTS. M. & M., vol. 29, p. 285. 10½ columns. I.

NEW EXPERIMENTS ON COAL-DUST EXPLOSIONS AT LIEVIN. By E. Walch. E. & M. J., vol. 89, p. 381. 1½ columns.

- COAL-DUST EXPERIMENTS. E. & M. J., vol. 88, p. 878. 1½ columns.
- SOME RESULTS OF EXPERIMENTS MADE TO TEST THE EFFECT OF SPRAYERS UPON THE MOISTURE OF MAIN ROADS AT BRANDON COLLIERY. By T. L. Elwen. T. I. M. E., vol. 38, p. 311, 9 pages. I.
- SOME FRENCH EXPERIMENTS ON COAL DUST. By H. Briggs. E. & M. J., vol. 90, p. 1266. 14½ columns.
- COAL-DUST EXPERIMENTS. E. & M. J., vol. 86, p. 817. 1 column.
- FRENCH COAL-DUST EXPERIMENTS. By J. Taffanel. Colliery Guardian, Aug. 13, 1909.
- EXPERIMENTS ON COAL-DUST DEPOSITS. By L. Morin. Colliery Guardian, Apr. 28, 1911.
- DUST IN MINES. Colliery Engineer, vol. 10, p. 20.
- AMOUNT OF COAL DUST IN AIRWAYS. M. & M., vol. 29, p. 223. 1 column.
- NEW AND OLD COAL DUST. M. & M., vol. 29, p. 127. 2½ columns.
- COAL-MINE DUST. E. & M. J., vol. 86, p. 89. 1 column. I.
- COAL DUST IN MINES. J. M. Soc. N. S., vol. 13, p. 66. 1½ pages.
- SUPPRESSING COAL DUST. Iron & Coal Trades Rev., Nov. 26, 1909.
- METHOD OF DEALING WITH COAL DUST IN WESTPHALIA. Colliery Guardian, June 11, 1909, p. 1170; June 18, 1909, p. 1219.
- PREVENTING DUST FORMATION. By Herr Meissner. Gluckauf, July 8, 1911.
- REDUCTION, CONTROL AND COLLECTION OF COAL DUST IN MINES. By S. Mavor. Colliery Guardian, Sept. 15, 1911.
- INVESTIGATIONS ON THE DRYING OF COAL MINES AND THE CONTROL OF MINE DUST. By Herr Forstmann, Gluckauf, Jan. 15, 1911.
- EXTRACTING DUST FROM COAL MINES. Colliery Guardian, May 26, 1911.
- VENTILATING APPLIANCES AND DUST EXTRACTIONS IN COTTON MILLS. Engineering, Feb. 10, 1911.
- DUST REMOVAL IN COAL MINES. Electrical Review, May 26, 1911.
- DUST REMOVAL DEVICES IN RHINE LIGNITE DISTRICT. By Baldus. Gluckauf, Dec 5, 1908.
- DUST COLLECTION IN ANTHRACITE BREAKERS. M. & M., vol. 29, p. 222. 1 column. I.
- DEALING WITH COAL DUST. By P. A. Grady. M. & M., vol. 30, p. 336. 2 columns.
- PREVENTION OF COAL DUST. P. C. M. & M. Soc. S. A., vol. 9, p. 173. ½ column.
- COAL DUST AS A FACTOR IN MINE EXPLOSIONS. P. C. M. & M. Soc. S. A., vol. 9, p. 174. 1½ columns.
- CONDITIONS OF FORMATION OF DUST. By M. J. Taffanel. Colliery Guardian, Jan. 20, 1911.
- EXPERIMENTS ON LIQUID MIXTURES FOR LAYING COAL DUST. By W. M. Thornton. Iron & Coal Trades Review, Aug. 11, 1911.
- EXPERIMENTS ON LIQUID MIXTURES FOR LAYING COAL DUST. By W. M. Thornton, Mining Engineering, Sept., 1911.
- COAL-DUST PROBLEM. By John Verner. Coal Trade Bull., May 15, 1909.
- COAL DUST. By W. E. Garforth. Colliery Guardian, May 26, 1911.
- COAL-DUST QUESTION IN AMERICA. Colliery Guardian, Dec. 10, 1910.
- PRESENT POSITION OF THE COAL-DUST PROBLEM. By J. S. J. Ashworth. Canadian Min. Jour., Nov. 1, 1908.
- THE COAL-DUST QUESTION IN GREAT BRITAIN. By H. Hall. E. & M. J., vol. 87, p. 1084. 17 columns. I.
- THE COAL-DUST PROBLEM. By J. Verner. M. & M., vol. 29, p. 466. 6½ columns. I.

- AN ANALYSIS OF THE COAL-DUST PROBLEM. By A. H. Stow. E. & M. J., vol. 89, p. 1284. 11½ columns.
- THE DUST PROBLEM IN COAL MINES. By J. Virgin. E. & M. J., vol. 88, p. 734. 1½ columns.
- INFLUENCE OF COAL DUST IN MINES. By Henry Kinlock. Colliery Guardian, vol. 9, p. 568.
- DANGERS OF COAL DUST. E. & M. J., vol. 90, p. 178. 2 columns.
- LESSONS FROM COAL-DUST EXPLOSIONS. E. & M. J., vol. 89, p. 1170. 3½ columns. I.
- EXPLOSIBILITY OF COAL DUST. M. & M., vol. 31, p. 369. 1 column.
- THE EXPLOSIBILITY OF COAL DUST. By G. S. Rice. U. S. G. S., Bull. 425, 186 pages. I+.
- EXPLOSIBILITY OF COAL DUST. E. & M. J., vol. 90, p. 616. 2½ columns.
- EXPLOSIBILITY OF COAL DUST. Engineer, Dec. 9, 1910.
- DUST AS AN EXPLOSIVE; from Amer. Exchange Review. Sci. Am. Sup. No. 125, Mar. 25, 1878.
- IS COAL DUST, AS SUCH, EXPLOSIVE? By A. H. Stow. E. & M. J., vol. 87, p. 17. 9 columns.
- IS DUST, AS SUCH, EXPLOSIVE? By F. Haas. M. & M., vol. 29, p. 227. 4½ columns.
- COMPARATIVE INVESTIGATION OF THE INFLAMMABILITY OF COMBUSTIBLE COAL DUSTS. By M. J. Taffanel. Revue de Metal, May, 1911.
- INFLAMMABILITY OF MIXTURES OF COAL DUST AND AIR. By P. P. Bedson. Iron & Trades Review, June 3, 1910.
- INFLAMMABILITY OF SHALE DUST. E. & M. J., vol. 89, p. 786. 1 column.
- EXPERIMENTS ILLUSTRATIVE OF THE INFLAMMABILITY OF MIXTURES OF COAL DUST AND AIR. By P. P. Bedson. T. I. M. E., vol. 39, p. 719. 9 pages. I.
- EXPLOSIVE EFFECT OF ELECTRIC CURRENTS ON COAL DUST. E. & M. J., vol. 85, p. 722. 1½ columns.
- EXPLOSIVE EFFECT OF ELECTRIC CURRENTS ON COAL DUST. E. & M. J., vol. 85, p. 1110. 1½ columns.
- See also CAUSE OF ACCIDENTS, AND ELECTRICITY IN THE MINE.
- THE PROBLEM OF TREATING DUST IN COAL MINES. By F. Haas. E. & M. J., vol. 86, p. 814. 9 columns.
- DUST AND DUST-LAYING. P. C. M. & M. Soc. S. A., vol. 7, p. 163. 3 columns.
- PULVERIZED SHALE FOR PREVENTION OF COAL DUST EXPLOSIONS. E. & M. J., vol. 87, p. 11. ½ column.
- CALCIUM-CHLORIDE TREATMENT FOR DUST. M. & M., vol. 29, p. 216. 2 columns.
- COAL DUST AND ITS TREATMENT WITH CALCIUM CHLORIDE. E. & M. J., vol. 89, p. 1125. ½ column.
- USE OF CALCIUM CHLORIDE IN MINES TO MAINTAIN DAMP CONDITIONS AND LAY DUST. M. & M., vol. 30, p. 336. ½ column.
- COAL DUST AND CALCIUM CHLORIDE. E. & M. J., vol. 90, p. 589. ½ column.
- COAL DUST TO DATE, AND ITS TREATMENT WITH CALCIUM CHLORIDE. By Henry Hall. T. I. M. E., vol. 36, p. 500. 36 pages. I.
- COAL DUST AND ITS TREATMENT WITH CALCIUM CHLORIDE. T. I. M. E., vol. 37, p. 553. 7 pages.
- SPRAYING COAL DUST AS A COLLIERY SAFEGUARD. By D. Harrington. E. & M. J., vol. 87, p. 194. 9½ columns. I.
- SPRAYING COAL MINES. By D. Harrington. M. & M., vol. 29, p. 102. 4½ columns. I.
- EXPERIMENTS WITH SPRAYERS IN COAL MINES. E. & M. J., vol. 89, p. 831. 1½ columns.
- THE EFFICIENCY OF SPRINKLING: Prevention of Coal Dust Explosions. E. & M. J., vol. 88, p. 78. ½ column.
- MINE SPRAYS AT THE BANNER MINE, ALABAMA. E. & M. J., vol. 90, p. 327. 2½ columns.

- EFFECT OF DAMPNES FROM SPRAYING MINES OR MINERS. E. & M. J., vol. 90, p. 328. $\frac{1}{2}$ column.
- COAL DUST SPRINKLING E. & M. J., vol. 85, p. 1009. 1 column. I
- COAL-DUST EXPLOSIONS. By J. Ver-ner. M & M., vol. 31, p. 623. 11 $\frac{1}{2}$ columns.
- DUST EXPLOSIONS IN COAL MINES. By G. S. Rice. T A I. M. E., vol. 41, p. 236. 5 pages.
- STONE DUST ZONES: Relating to Coal Dust Explosions. M. & M., vol. 31, p. 666. 1 column.
- DUST EXPLOSION AT MINNEAPOLIS, MAY 2, 1878, AND OTHER DUST EXPLOSIONS. By S. F. Peckham. M & M., vol. 29, p. 55. 6 $\frac{1}{2}$ columns I.
- COAL-DUST EXPLOSIONS M. & M., vol. 29, p. 103. 1 column.
- REPORT OF THE FRENCH COMMISSION ON EXPLOSIVES AND COAL DUST M. & M., vol. 29, p. 106. 2 columns
- COAL DUST AND MINE EXPLOSIONS. E. & M. J., vol. 88, p. 410. 2 columns.
- DUST EXPLOSIONS IN COAL MINES By F. Bache M. & M, vol. 30, p. 347. 3 columns.
- COAL DUST EXPLOSIONS Min Mag. London, vol. 2, p. 150. $\frac{1}{2}$ column.
- GAS AND DUST IN MINE EXPLOSIONS. E. & M. J., vol. 85, p. 554. 1 column.
- EXPERIMENTS IN COAL DUST. By W. E. Garforth. Nature, Oct. 20, 1908
- COAL DUST EXPERIMENTS. By William Galloway. Sci. Am. Sup, Mar. 23, 1882.
- RECENT COAL DUST EXPERIMENTS. By Henry Hall Colliery Guardian, Jan. 20, 1911.
- COAL DUST EXPERIMENTS. By Dr. Czapliński. Iron & Coal Trades Review, Sept. 10, 1909.
- BRITISH COAL DUST EXPERIMENTS. Iron & Trades Review, Oct. 1, 1909.
- BRITISH COAL DUST EXPERIMENTS. Colliery Guardian, July 30, 1909.
- REPORT OF THE FRENCH COMMISSION ON EXPLOSIVES AND COAL DUST. M. & M., vol. 29, p. 106. 2 columns.
- NOTES ON RECENT DEMONSTRATIONS OF COAL-DUST PHENOMENA. By James Ashworth. T. I. M. E., vol. 36, p. 366. 12 pages.
- RECENT DEMONSTRATIONS OF COAL-DUST PHENOMENA. T. I. M. E., vol. 37, p. 234. 19 pages.
- THE BAROMETRIC AND TEMPERATURE CONDITIONS AT THE TIME OF DUST-EXPLOSIONS IN THE APPALACHIAN COAL-MINES. By N. H. Mannakee. T. A. I. M. E., vol. 40, p. 655. 12 pages.
- RECENT DUST PREVENTION EXPERIMENTS By Hert Quiring. Gluckauf, July 15, 1911.
- SHALE-DUST AND COAL-DUST TESTS AT BROXBURN. By R McLaren and W Clark. T. I. M. E., vol. 38, p. 362. 13 $\frac{1}{2}$ pages. I.
- METHODS OF HEATING BITUMINOUS COAL DUST. By Hert Schwidtal. Gluckauf, Aug. 5, 1911.
- MICROSCOPIC EXAMINATION OF COAL DUST. By James Lomax Iron & Coal Trades Rev, Apr. 21, 1911
- SOME MEMORANDA CONCERNING COAL-DUST AND THE ESSENTIAL PRINCIPLES OF THE COAL-DUST THEORY. By H W. G Halbaum. T. I. M. E., vol. 39, p. 728. 34 pages.
- COMPARATIVE STUDY OF COMBUSTIBLE DUSTS Colliery Guardian, June 21, 1911.
- ESSENTIAL PRINCIPLES OF THE COAL DUST THEORY. By H. W G Halbaum. Colliery Guardian, June 3, 1910. p. 1065. 4 columns
- HISTORY OF THE COAL DUST THEORY. By W. Walker. Colliery Guardian, vol. 12, p. 268.
- DANGEROUS PROPERTIES OF DUST. By Prof. A T. Abel. Sci. Am. Sup. No. 374, Mar. 3, 1883; No. 375, Mar. 10, 1883.

DISTILLATION OF VOLATILE HYDROCARBONS DURING AN EXPLOSION OF COAL DUST. E. & M. J., vol. 87, p. 18. $\frac{3}{4}$ column.

ELECTRICITY AND COAL DUST. E. & M. J., vol. 89, p. 1238. 1 column.

IGNITION OF COAL DUST BY ELECTRIC FLASHES. By W. M. Thornton and E. Bowden. Iron & Coal Trades Rev., Apr. 15, 1910

IGNITION FROM INCANDESCENT FILAMENTS OF ELECTRIC LAMPS. By E. Lemaire. Iron & Coal Trades Rev., Sept. 8, 1911.

IGNITION OF COAL DUST BY SINGLE ELECTRIC FLASHES. E. & M. J., vol. 89, p. 1169. 2 columns.

ONE EXPERIMENTS TO ILLUSTRATE THE IGNITION OF COAL DUST BY MEANS OF ELECTRICITY. By J. Cadman. T. I. M. E., vol. 39, p. 93. 4 pages

THE IGNITION OF COAL DUST BY SINGLE ELECTRIC FLASHES. By W. M. Thornton. T. I. M. E., vol. 39, p. 201. 24 pages. I.

THE IGNITION OF COAL DUST BY A NAKED LIGHT. By J. Cadman. T. I. M. E., vol. 38, p. 256. 3 pages.

See also **MINE ATMOSPHERE AND GASES.**

Chambers of Refuge

REFUGE CHAMBERS IN COAL MINES. By G. S. Rice. E. & M. J., vol. 90, p. 419. 11 columns. I.

SAFETY CHAMBERS IN COAL MINES. E. & M. J., vol. 90, p. 32. $1\frac{1}{2}$ columns.

REFUGE CHAMBERS IN MINES. Min. & Sci. Press., vol. 100, p. 890. $2\frac{1}{2}$ columns. I.

GALLERY RESCUE CHAMBERS. P. C. M. & M. Soc. S. A., vol. 9, p. 281. Note.

Mine Fires

ORIGIN OF MINE FIRES. E. & M. J., vol. 89, p. 159. 1 column.

See also **CAUSE OF ACCIDENTS.**

FIRE AND FIRE RISKS. P. C. M. & M. Soc. S. A., vol. 7, p. 87. 1 column.

RECOLLECTIONS OF MINE FIRES. By W. Crosley. Min. Mag., London, vol. 3, p. 129. 6 columns. I.

MINE FIRES. E. & M. J., vol. 85, p. 1158. 1 column.

MINE FIRES. E. & M. J., vol. 87, p. 300. $\frac{1}{4}$ column.

MINE FIRES. By T. K. Adams. M. & M., vol. 31, p. 274. $3\frac{1}{2}$ columns.

THE IDAHO MINE FIRE. Min. & Sci. Press, vol. 100, p. 717. $\frac{1}{4}$ column.

FIRE AT THE HOMESTAKE MINE. Min. & Sci. Press, vol. 96, p. 809. 2 columns.

FIRE IN LONDON MINE OF TENNESSEE COPPER COMPANY. By N. H. Emons. E. & M. J., vol. 88, p. 1181. 3 columns. I.

COCKERILL MINE FIRE. M. & M., vol. 30, p. 569. $\frac{1}{4}$ column.

NOTES ON THE CHERRY MINE DISASTER. By G. S. Rice. J. W. Soc. E., vol. 14, p. 797. 25 pages. I.

THE CHERRY MINE DISASTER. M. & M., vol. 30, p. 423. $10\frac{1}{2}$ columns.

THE CHERRY MINE DISASTER. M. & M., vol. 30, p. 296. $3\frac{1}{2}$ columns.

THE CHERRY MINE DISASTER AND ITS LESSONS. By S. Reynolds. E. & M. J., vol. 89, p. 525. $3\frac{1}{2}$ columns.

A CHERRY MINER'S LAST MESSAGE. By F. W. Parsons. E. & M. J., vol. 88, p. 1173. $1\frac{1}{2}$ columns.

THE STORY OF THE ST. PAUL MINE FIRE. By F. W. Parsons. E. & M. J., vol. 88, p. 1119. $17\frac{1}{2}$ columns. I.

ANOTHER VIEW OF THE ST. PAUL MINE DISASTER. By L. F. Wilson. E. & M. J., vol. 88, p. 1175. $2\frac{1}{2}$ columns.

MINE FIRES IN THE LIGNITE MINES OF ITALY. E. & M. J., vol. 89, p. 1180. $1\frac{1}{2}$ columns.

THE PRICE-PANCOAST DISASTER. M. & M., vol. 31, p. 616. 6 pages. Map.

- A SHAFT FIRE IN THE SHATTUCK MINE, BISBEE, ARIZONA.** By J. Stauber. E. & M. J., vol. 85, p. 197. 2 columns.
- AN UNDERGROUND FIRE DISASTER.** By J. Ashworth. E. & M. J., vol. 86, p. 1060. $6\frac{1}{2}$ columns. I
- UNDERGROUND FIRES IN FIERY MINES.** By W. T. Heslop. T. I. M. E., vol. 38, p. 338. 16 pages. I.
- UNDERGROUND FIRES IN GASSY MINES.** E. & M. J., vol. 89, p. 882. $1\frac{1}{2}$ columns.
- UNDERGROUND FIRES IN MINES.** By A. Aron. T. I. M. E., vol. 37, p. 700. 1 page
- See also CAUSE OF ACCIDENTS.
- ANTHRACITE BREAKER FIRES.** E. & M. J., vol. 89, p. 1172. 2 columns
- FIGHTING A MINE FIRE, NOVA SCOTIA.** By F. W. Gray. M. & M., vol. 29, p. 210. $2\frac{1}{2}$ columns. I.
- FIGHTING FIRE IN AN ANTHRACITE COAL MINE** By P. H. Devers. E. & M. J., vol. 86, p. 86. $9\frac{1}{2}$ columns
- FIGHTING AN UNDERGROUND FIRE WITH OXYGEN BREATHING APPARATUS** By F. W. Gray. E. & M. J., vol. 86, p. 858. $2\frac{1}{2}$ columns.
- FIGHTING THE FIRE AT THE HOMESTAKE MINE** By B. C. Yates. E. & M. J., vol. 85, p. 633. $23\frac{1}{2}$ columns. I.
- PUTTING OUT THE HOMESTAKE MINE FIRE BY FLOODING** E. & M. J., vol. 85, p. 636. $2\frac{1}{2}$ columns.
- FOAM AS A FIRE EXTINGUISHER** M. & M., vol. 30, p. 4. 1 column.
- FIGHTING A COAL-MINE FIRE.** By F. Lynde. E. & M. J., vol. 88, p. 565. $\frac{1}{2}$ column.
- SUCCESSFULLY QUENCHING A MINE FIRE.** M. & M., vol. 30, p. 340. $2\frac{1}{2}$ columns. I.
- DEALING WITH MINE FIRES.** M. & M., vol. 31, p. 275. $\frac{1}{2}$ column.
- METHODS OF DEALING WITH GOB-FIRES IN THE MAIN COAL SEAM AT NETHERSEAL COLLIERY.** By F. N. Siddall. T. I. M. E., vol. 36, p. 454. 19 pages. I.
- EXTINGUISHING THE FIRE IN THE TESTASECCA MINE, SICILY.** By F. C. Chrambach. T. I. M. & M., vol. 18, p. 153. 4 pages. I.
- THE REDUCTION OF FIRES IN MINES.** By A. G. Morse. E. & M. J., vol. 88, p. 166. $1\frac{1}{2}$ columns
- SULPHUR DIOXIDE AS AN AGENT IN FIGHTING MINE FIRES.** By W. O. Snelling. T. A. I. M. E., vol. 39, p. 550. 3 pages.
- USE OF STEAM IN EXTINGUISHING FIRE AT HOMESTAKE MINE.** E. & M. J., vol. 85, p. 635. 2 columns.
- SEALING OFF SUMMIT HILL MINE FIRE.** By H. H. Stoeck. M. & M., vol. 30, p. 1. $8\frac{1}{2}$ columns. I.
- SEALING OFF A FIRE.** M. & M., vol. 29, p. 367. $\frac{1}{2}$ column.
- TEMPORARY FIRE WALLS FOR COAL MINES.** E. & M. J., vol. 87, p. 650. $\frac{1}{2}$ column
- See also UNDERGROUND DAMS.
- DANGER OF USING CULM FOR FILLS ABOUT FOUNDATIONS: FIRES** By F. W. Brady. M. & M., vol. 29, p. 58. 1 column I
- See also PACKING MINE WORKINGS.
- MINE FIRE AT BUTTE.** M. & M., Apr., 1901, p. 423.
- See also DESCRIPTION OF DAMS AND THEIR CONSTRUCTION.
- See also STOPPINGS, DOORS AND REGULATORS.
- See also UNDERGROUND DAMS.
- See also MINE ATMOSPHERE AND GASES.

Mine Regulations

- RULES FOR THE GUIDANCE OF EMPLOYEES UNDERGROUND.** By R. C. Turner. Min. & Sci. Press, vol. 95, p. 493. 2 columns.
- MINING SAFETY LAWS.** E. & M. J., vol. 87, p. 175. 6 columns.

REGULATIONS GOVERNING THE COAL MINES OF THE ACADIA COAL COMPANY, NOVA SCOTIA. J. M. Soc. N. S., vol. 13, p. 58. 2 pages.

GENERAL MINE RULES OF THE STAG CAÑON FUEL Co, New Mexico T. A. I. M. E., vol. 40, p. 358. 2½ pages.

RULES AND REGULATIONS OF THE STAG CAÑON FUEL COMPANY, NEW MEXICO. M. & M., vol. 31, p. 654. 2 columns.

RULES OF THE H. C. FRICK COKE COMPANY. M. & M., vol. 29, p. 15 2 columns.

ALABAMA INSPECTOR'S WARNING CARD. M. & M., vol. 31, p. 763 1 column

CHANGES IN MINE REGULATIONS DURING 1908-1909 E. & M. J., vol. 89, p. 1228. 4 columns.

See also **DISCIPLINE IN MINES.**

See also **USE OF EXPLOSIVES IN COAL MINING.**

See also **INSPECTION OF MINES.**

Spontaneous Combustion in and about Mines

SPONTANEOUS COMBUSTION OF COAL. By E. Stansfield. J. C. M. I., vol. 13, p. 196. 33 pages. D.

SPONTANEOUS COMBUSTION. By T. Seabridge T. I. M. E., vol. 36, p. 109. 8 pages. I

SPONTANEOUS COMBUSTION OF COAL. By S. W. Parr and F. W. Kressman. Univ. of Ill. Bull. 46, Dec. 19, 1911.

SPONTANEOUS COMBUSTION IN COAL MINES By W. H. Shore Colliery Engineer, vol. 11, page 162.

SPONTANEOUS IGNITION OF COAL IN ENGLAND Dysart-Main Seam. T. I. M. E., vol. 36, p. 568. Note.

SPONTANEOUS IGNITION OF COAL AND ITS PREVENTION By V. B. Lewes. Colliery Engineer, vol. 12, p. 219.

SPONTANEOUS IGNITION OF COAL. By R. O. Doane, Engineering News, Aug. 18, 1904; Mining Mag., Sept., 1904.

SPONTANEOUS IGNITION OF COAL. P. C. M. & M. Soc. S. A., vol. 7, p. 226. ½ column.

See also **DECOMPOSITION OF COAL.**

Mine Explosions

EXPLOSIBILITY OF NATURAL GAS. P. E. Soc. W. Pa., vol. 2, p. 343. 2 pages.

See also **MINE ATMOSPHERE AND GASES**

COLLIERY EXPLOSIONS AND THEIR CAUSES By Percy W. Taylor. Cassier's Magazine, July, 1911.

EXPLOSIONS IN COAL MINES. By W. Seddon Colliery Engineer, vol. 9, p. 151.

EXPLOSIONS IN COAL MINES By R. P. W. Oswald. Colliery Engineer, vol. 9, p. 232.

REVIEW OF COLLIERY EXPLOSIONS. By G. H. Winstanley Iron & Trades Review, Mar. 17, 1911.

COLLIERY EXPLOSIONS AND COAL DUST. Colliery Guardian, vol. 16, p. 204.

COLLIERY EXPLOSIONS. Colliery Engineer, vol. 11, pp. 176, 259, 268.

EXPLOSIONS IN COAL MINES E. & M. J., vol. 89, p. 928. 2½ columns.

EXPLOSIONS IN THE UNITED STATES DURING THE LAST THREE YEARS. By C. E. Munroe Min & Sci. Press, vol. 99, p. 681. 8½ columns.

EXPLOSIONS IN BITUMINOUS COAL MINES By G. P. Bartholomew. E. & M. J., vol. 85, p. 368. 1½ columns.

RECENT EXPLOSIONS IN COAL MINES. By H. M. Chance. E. & M. J., vol. 85, p. 553. 7½ columns.

RECENT MINE EXPLOSIONS E. & M. J., vol. 85, p. 1111. 1 column.

MINE EXPLOSIONS. P. C. M. & M. Soc. S. A., vol. 9, p. 246. 2 columns.

COLLIERY EXPLOSIONS IN PRUSSIA DURING 1907. T. I. M. E., vol. 37, p. 698. 2½ pages.

- EXPLOSIONS IN MINES AND COLLIERIES, AND METHODS OF VENTILATION. Min. Mag., vol. 1, p. 97. 10 pages. I.
- REMARKS ON SOME RECENT EXPLOSIONS IN COAL MINES. By C. J. Coll J. M. Soc. N. S., vol. 13, p. 51. 16½ pages.
- VIEWS RESPECTING COAL-MINE EXPLOSIONS: A Symposium. E. & M. J., vol. 87, p. 12. 14½ columns.
- REFLECTIONS ON SOME COLLIERY EXPLOSIONS. E. & M. J., vol. 90, p. 466. 6 columns.
- EXPLOSIONS IN MINES Experimental Station. P. C. M. & M. Soc. S A., vol. 9, p. 280. 1½ columns.
- THE MARIANNA EXPLOSION. M. & M., vol. 29, p. 272. 13½ columns. I.
- FACTS CONCERNING THE MARIANNA EXPLOSION. By F. W. Parsons. E. & M. J., vol. 86, p. 1162. 9 columns. I.
- THE LICK BRANCH EXPLOSION E & M. J., vol. 87, p. 171. ¾ column.
- LICK BRANCH DISASTER: Explosion. By H. H. Stoek. M & M., vol. 29, p. 360. 11½ columns. I.
- MINE EXPLOSION AT STEARNS, KENTUCKY. By H. M. Payne E. & M. J., vol. 89, p. 474 5½ columns. I.
- MINE EXPLOSION AT STEARNS, KENTUCKY. M. & M., vol. 30, p. 572. 4 columns. I.
- THE MULGA MINE EXPLOSION. M. & M., vol. 31, p. 40. 4 columns. I and map of workings.
- THE MULGA MINE EXPLOSION. E. & M. J., vol. 89, p. 978. 1½ columns.
- EXPLOSION AT PALAN No. 2 MINE. M. & M., vol. 31, p. 202. 3½ columns. I.
- EXPLOSION AT PALAN MINE, MEXICO M. & M., vol. 30, p. 462 2 columns. I.
- THE DELAGUA, COLORADO, EXPLOSION. By G. F. Duck. M. & M., vol. 31, p. 374. 13½ columns. I.
- NOTES ON THE DELAGUA, COLORADO, EXPLOSION. M. & M., vol. 31, 641. 4 columns. I.
- THE STARKVILLE, COLORADO, EXPLOSION. M. & M., vol. 31, p. 261. 4 columns. I.
- THE MORAL OF STARKVILLE. By S. Reynolds. M. & M., vol. 31, p. 391. 3½ columns.
- THE PRIMERO DISASTER By R. L. Herrick. M. & M., vol. 30, p. 463. 16 columns I.
- NANTICOKE DISASTER Colliery Engineer, vol. 12, p. 111.
- SOUTH WILKES-BARRE MINE EXPLOSION. M & M, vol. 30, p. 556. 1 column.
- WEHRUM MINE EXPLOSION. M. & M, vol. 30, p. 118. 4½ columns.
- REPORT ON THE MONONGAH MINE EXPLOSION. By George Harrison. E. & M. J., vol. 85, p. 264. 4 columns.
- THE BELLEVUE EXPLOSION, ALBERTA. By J. Ashworth. M. & M., vol. 31, p. 399. 4 columns I.
- THE PALOS MINE DISASTER M & M, vol. 30, p. 736. 2½ columns. I.
- BANNER MINE EXPLOSION M. & M., vol. 31, p. 675. 2 columns.
- NOTES ON THE NORTON HILL COLLIERY EXPLOSION. By H. M. Morgan. E. & M. J, vol. 87, p. 994. 5 columns
- A NATAL COLLIERY EXPLOSION, AND UNDERGROUND FIRES IN FIERY MINES. By W. T. Heslop. T I. M. E., vol. 38, p. 338. 16 pages. I. See also MINE FIRES.
- MAYPOLE AND HULTON DISASTERS: Mine Explosions M & M, vol. 31, p. 667. ¾ column.
- THE COKEDEALE, COLORADO, EXPLOSION. By G. F. Duck M. & M., vol. 31, p. 658. 9½ columns. Map.
- MINE GASES AND COLLIERY EXPLOSIONS. By H. B. Winstanley. Iron & Coal Trades Review, Oct. 8, 1909.
- GAS EXPLOSIONS IN BELGIUM. By Herr Bracht. Gluckauf, Apr. 2, 1910.

- PHENOMENA PRECEDING GAS EXPLOSIONS.** By Francis Laur. E. & M. J., Sept. 11, 1909.
- CATALYTIC ACTIONS AND EXPLOSIONS OF GAS** By Hans Fleissner The Vest Zeilscher f Berg u. Huttenwesen, Apr. 9, 1910.
- EXPLOSION IN WHICH COAL DUST WAS AN IMPORTANT ELEMENT.** Colliery Engineer, vol 9; p. 201.
- See also **COAL DUST AS AN EXPLOSIVE AGENT.**
- LIST OF FATAL AND NON-FATAL EXPLOSIONS OF FIRE-DAMP OR COAL DUST, AND BAROMETER, THERMOMETER, Etc., Readings for the years 1907 and 1908.** By P. Stezelecki. T. I. M. E., vol 36, p. 777. 2 pages. Tables.
- See also **MINE GASES AND BAROMETRIC PRESSURE.**
- ATMOSPHERIC PRESSURE AND MINE EXPLOSIONS.** By W. Hartman E. & M. J., vol. 89, p. 1164 1½ columns. D.
- THE CAUSE OF COAL-MINE EXPLOSIONS.** By William Griffiths. E. & M. J., vol. 85, p. 301. 1½ columns.
- MINE EXPLOSIONS AND THEIR CAUSES.** By J Taylor. E. & M. J., vol. 87, p. 1191. 1½ columns.
- REPORT ON CAUSE OF EXPLOSION AT THE SHORT CREEK MINE** E. & M. J., vol 87, p. 896. ¾ column.
- See also **CAUSE OF ACCIDENTS.**
- MINE EXPLOSIONS AS RELATED TO EARTHQUAKES** By W. A. Spalding. E. & M. J., vol. 88, p. 562. 5½ columns.
- MINE EXPLOSIONS AS RELATED TO EARTHQUAKES** By W. A. Spalding. E. & M. J., vol. 87, p. 899. 1 column.
- MINE EXPLOSIONS AS RELATED TO EARTHQUAKES.** By W. A. Spalding. E. & M. J., vol. 87, p. 411. 9 columns.
- SEISMIC DISTURBANCES AND COAL-MINE EXPLOSIONS.** By A. H. Stow. E. & M. J., vol. 88, p. 449. 5½ columns.
- EXTENSION EXPLOSION.** By E Jacobs. Canadian Min. Jour, Jan 1, 1910.
- EFFECT OF HUMIDITY ON MINE EXPLOSIONS:** Discussion of Paper of C. Scholz, T. A. I. M. E., vol. 39, p. 324. vol. 40, p. 835. 14 pages.
- EFFECT OF HUMIDITY ON MINE EXPLOSIONS** By C Scholz. T. A. I. M. E., vol. 39, p. 328. 8 pages.
- EFFECT OF HUMIDITY ON MINE EXPLOSIONS.** By C. Scholz M. & M., vol. 29, p. 156. 6½ columns. I.
- See also **MINE ATMOSPHERE AND GASES.**
- THE PHENOMENA PRECEDING GAS EXPLOSIONS.** By F Laur E. & M. J., vol. 88, p. 500. 8 columns.
- PREVENTION OF MINE EXPLOSIONS.** P. C. M. & M. Soc. S. A., vol. 9, p. 282. 3½ columns.
- THE PREVENTION OF COAL-MINE EXPLOSIONS.** By W. B. Williams E. & M. J., vol. 85, p. 816. 3 columns.
- EQUIPMENT FOR THE PREVENTION OF MINE EXPLOSION.** By W.S. Mayers E. & M. J., vol 85, p. 409. 4½ columns.
- THE PREVENTION OF MINE EXPLOSIONS.** E. & M. J., vol. 86, p. 860. 6½ columns.
- PREVENTION OF MINE EXPLOSIONS, REPORT AND RECOMMENDATIONS.** By V. Watteym, C. Meisener, and R. Desborough. U. S. G. S., Bull. 369, 11 pages, 1908.
- PREVENTION OF MINE EXPLOSIONS.** M. & M., vol. 29, p. 193. 3½ columns.
- PREVENTING MINE EXPLOSIONS.** By G. H. Ashley. M. & M., vol. 29, p. 16. 4 columns.
- PREVENTION OF MINE EXPLOSIONS.** By J. Ashworth. M. & M., vol. 29, p. 325. 2½ columns. I.

THE CONTROL OF COAL MINE EXPLOSIONS. By H. J. Nelms. E. & M. J., vol. 87, p. 14, 2½ columns.

See also **PROTECTION IN MINING.**

THE VALUE OF ZONES IN STOPPING FLAME. By J. Virgin. E. & M. J., vol. 88, p. 1173. 1½ columns.

ISOLATION OF CERTAIN AREAS FROM CONTACT WITH AFTER-GASES BY AN EXPLOSION. By N. Robinson. M. & M., vol. 29, p. 372. 1½ columns. I.

See also **MINE ATMOSPHERE AND GASES.**

A WARNING TO COAL MEN: Relating to Mine Explosions. By E. Haworth. M. & M., vol. 31, p. 672. 3 columns.

SEALING SHAFTS AFTER EXPLOSION. By J. A. Garcia. M. & M., vol. 30, p. 59. 6½ columns. I.

ROYAL COMMISSION REPORT. Colliery Guardian, vol. 63, 1892.

Poisoning and Injuries

LEAD POISONING AND SUBLIMED WHITE LEAD. By J. I. Blair. E. & M. J., vol. 90, p. 1061. 2½ columns.

PHOSPHOROUS POISONING. M. & M., vol. 31, p. 693. 1 column.

HYDROCYANIC ACID POISONING. E. & M. J., vol. 86, p. 407. ½ column.

DANGERS OF WHITE ARSENIC. P. C. M. & M. Soc. S. A., vol. 9, p. 314. ½ column.

ANTIDOTE FOR ARSENIC POISONING. M. & M., vol. 29, p. 508. Note.

GASEOUS POISONING. P. C. M. & M. Soc. S. A., vol. 5, p. 192. 4 columns.

THE HÆMATOLOGY OF CARBON-MONOXIDE POISONING. P. C. M. & M. Soc. S. A., vol. 7, p. 386. 3½ columns.

NOTES ON THE PERSISTENCE OF CYANIDE IN THE STOMACH AFTER DEATH. By W. H. Jollyman. P. C. M. & M. Soc. S. A., vol. 5, p. 170. 3½ columns.

CHLOROFORM AS AN ANTIDOTE AGAINST NITROUS VAPOURS. By A. Prister. P. C. M. & M. Soc. S. A., vol. 5, p. 63. ½ column.

TREATMENT OF BURNS. P. C. M. & M. Soc. S. A., vol. 5, p. 67. ½ column.

Powder Explosions

THE EXPLOSION AT THE MEXICAN MINE. By R. A. Kinzie. M. & M., vol. 30, p. 639. 1½ columns. I.

EXPLOSION AT THE ALASKA-MEXICAN MINE. By R. A. Kinzie. E. & M. J., vol. 89, p. 603. 2 columns. I.

EXPLOSION AT MEXICAN MINE, ALASKA. By R. A. Kinzie. Min. & Sci. Press, vol. 100, p. 423. 1½ columns. I.

Hoisting Accidents

See first volume of Index.

Boiler Explosion

EXPLOSION HEARD AFAR. Min. & Sci. Press, vol. 96, p. 419. Note.

See also first volume of Index.

Earth and Snow Slides: Avalanches

SNOWSLIDES IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 505. ½ column. I.

LANDSLIDES IN THE SAN JUAN MOUNTAINS, COLORADO, INCLUDING A CONSIDERATION OF THEIR CAUSES AND THEIR CLASSIFICATION. By L. C. Graton and C. H. Gordon. U. S. G. S., Professional Paper 67, 58 pages. I. 1909.

LANDSLIDE OR "ROCK-STREAM" AT HEAD OF AMERICAN BASIN, COLORADO. Min. & Sci. Press, vol. 101, p. 698. ½ column. I.

THUNDER-MOUNTAIN LANDSLIDE. By K. Baumgarten. Min. & Sci. Press, vol. 101, p. 698. 3 columns. I.

Lightning Entering Mines

See first volume of Index.

ANIMALS IN MINES

MINE MULES AND THEIR CARE. By Robert Grimshaw E. & M. J., vol. 86, p. 25. 3 columns.

TREATMENT OF MINE PONIES. By A. H. Stokes E. & M. J., vol. 89, p. 1240. 3 columns.

THE CARE OF MINE MULES. M. & M., vol. 31, p. 650. 5½ columns. I.

CONCRETE BATH TUB FOR MINE MULES. E. & M. J., vol. 90, p. 593 ½ column.

Stables

INSIDE STABLES FOR MINES. By J. W. Byers M. & M., vol. 30, p. 477. 2½ columns.

MINE STABLES FOR MULES M. & M., vol. 31, p. 650. 5½ columns. I.

CONCRETE UNDERGROUND MINE STABLES. By J. H. Haertter. Coal Mining Supplement, E. & M. J., vol. 88, p. 31. 10½ columns. I.

BLASTING IN MINES: METHODS AND CONDITIONS

THE THEORY OF BLASTING WITH HIGH EXPLOSIVES By E. M. Weston P. C. M. & M. Soc S. A., vol. 9, p. 111 16½ columns, I, p. 193; 2 columns, I; p. 232, 6 columns, p. 343, 5 columns.

THE THEORY OF BLASTING WITH HIGH EXPLOSIVES. By H. M. Thomas. E. & M. J., vol. 88, p. 349. 10½ columns. I.

CONDITION AFFECTING LENGTH OF DRILL HOLE TO BE USED. E. & M. J., vol. 85, p. 440 2 columns.

A NEW METHOD OF BLASTING. E. & M. J., vol. 85, p. 459. ¾ column.

METHOD OF BLASTING IN ROOM-WORK, THE POCAHONTAS REGION. M. & M., vol. 29, p. 399. ½ column. I.

THE KNOX SYSTEM OF BLASTING. M. & M., vol. 31, p. 36. ¼ column.

BLASTING IN MINES' Suggestions of Committee to American Mining Congress. E. & M. J., vol. 90, p. 603. 1 column.

USE OF HIGH EXPLOSIVES IN MINING. E. & M. J., vol. 89, p. 207. 1½ columns.

LOADING A BLAST HOLE. E. & M. J., vol. 86, p. 433. 1½ columns. I.

LOADING BLAST HOLES. E. & M. J., vol. 86, p. 971. 2½ columns.

LOADING BLAST HOLES. E. & M. J., vol. 86, p. 1111. 1 column.

CIRCUIT TESTERS FOR BLASTERS. E. & M. J., vol. 90, p. 1195. 1½ columns

A CIRCUIT TESTER FOR BLASTING. Min. & Sci. Press, vol. 101, p. 543. 1 column

DRILLING AND BLASTING AT THE KALGOORLIE MINES, WEST AUSTRALIA. E. & M. J., vol. 85, p. 196. 1 column.

PLACING CHARGES IN CHURN DRILL HOLES, BINGHAM CANYON, UTAH. Min. & Sci. Press, vol. 98, p. 554. ½ column.

BLASTING DEEP HOLES. By O. H. Packer. Min. & Sci. Press, vol. 99, p. 328. 1½ columns

CHURN DRILLING FOR BLASTING. E. & M. J., vol. 88, p. 178. ¾ column.

See also CHURN DRILLS AND DRILLING.

BLASTING IN OIL-SHALE MINING, SCOTLAND. T. I. M. E., vol. 36, p. 586. ½ page.

BLASTING IN STOPING. P. C. M. & M. Soc. S. A., vol. 9, p. 233. 5 columns.

BLASTING IN STOPING. P. C. M. & M. Soc. S. A., vol. 9, p. 198. 4 columns. I.

THE USE OF EXPLOSIVES IN HARD GROUND. T. A. I. M. E., vol. 11, p. 163. 1 page.

BLASTING SUPPLIES. By F. H. Gunsolus. M. & M., vol. 31, p. 222. 6 columns. I.

See also EXPLOSIVES FOR MINING PURPOSES

BLOWN-OUT SHOTS. P. C. M. & M. Soc. S. A., vol 9, p. 319. 2 columns.

WINDY SHOTS IN COAL MINES E. & M. J., vol 87, p 467. 2 columns.

See also CAUSES OF ACCIDENTS, AND MINE EXPLOSIONS.

Blasting in Metal Mines

See also COST OF BLASTING.

Blasting in Coal Mines

See first volume of Index.

Methods of Charging and Firing Explosives

THE ORIGIN OF ELECTRIC SHOT FIRING. E & M. J., vol 89, p. 1002. $\frac{1}{2}$ column.

PRINCIPLES OF ELECTRIC BLASTING. By W. G. Hudson M & M, vol 31, p 393. 7 columns. I

A SELECTIVE ELECTRIC FUSE SPITTING DEVICE. By R. N Bell E & M. J., vol. 86, p. 528. 2 $\frac{1}{2}$ columns. I

SHOT-FIRING BY ELECTRICITY. By D. Harrington. M. & M, vol 29, p. 38. 4 $\frac{1}{2}$ columns I.

FIRING SHOTS FROM THE ELECTRICAL POWER SERVICE. E. & M. J., vol. 87, p 617. 1 $\frac{1}{2}$ columns

ELECTRIC SHOT-FIRING IN COAL MINES. By D. Harrington. E. & M. J., vol. 87, p. 243. 12 columns.

FIRING SHOTS IN MINES BY ELECTRICITY By S. F. Walker. E. & M. J., vol 89, p. 228. 6 $\frac{1}{2}$ columns. I.

ELECTRIC FIRING OF EXPLOSIVES E. & M. J., vol. 89, p. 670. 1 $\frac{1}{2}$ columns.

ELECTRIC SHOT-FIRING. By J Douglas. T. I. M. E., vol. 38, p. 332. 5 pages.

METHOD OF SHOOTING COAL BY BATTERY IN THE STAG CAÑON FUEL COMPANY'S MINES, New Mexico. T. A. I. M. E., vol. 40, p. 361. 1 page. I.

GROUP ELECTRIC SHOT FIRING. By S F. Walker. E & M. J., vol 85, p 1249. 5 columns.

COUPLING OF BLASTING-CHARGES IN ELECTRICAL SHOT-FIRING. $\frac{1}{2}$ p. abst T. I. M. E., vol. 26, p 624.

FAILURE OF SHOTS FIRED ELECTRICALLY. E & M. J., vol 89, p. 229. $\frac{1}{2}$ column

See also ELECTRICITY IN THE MINE SHOT-FIRING IN COAL MINES Suggestions. By J. J Rutledge. E. & M. J., vol. 87, p 13. 2 $\frac{1}{2}$ columns.

See also USE OF EXPLOSIVES IN COAL MINING.

SHOT FIRERS. By Pete Hauraty. M. & M., vol. 29, p. 552. 2 $\frac{1}{2}$ columns.

THE SHOT-FIRER'S DUTIES E. & M. J., vol. 87, p. 244. 1 $\frac{1}{2}$ columns

See also MINE REGULATIONS.

CAUSE OF MISFIRES. E. & M. J., vol. 87, p 244. $\frac{1}{2}$ column

HANG FIRES: Delayed Shots. By W. Maurice. Min. & Sci. Press., vol. 96, p. 300. 1 $\frac{1}{2}$ columns.

See also CAUSE OF ACCIDENTS.

METHOD OF CHARGING PERMISSIBLE EXPLOSIVES E & M. J., vol. 89, p 671. 1 $\frac{1}{2}$ columns

CHARGING BLAST HOLES Method of Demonstrating Employed by the Pittsburg Testing Station. M. & M., vol. 31, p 44 1 $\frac{1}{2}$ columns I

LOADING HOLES IN BLASTING. E. & M. J., vol 87, p. 245. 1 column

LOADING BLAST HOLES AND DRIVING SMALL DRIFTS. By G. C. McFarlane. E & M. J., vol. 87, p 225. 3 $\frac{1}{2}$ columns.

LOADING A HOLE WITH DYNAMITE. E. & M. J., vol. 85, p. 491 1 column.

PREPARATIONS FOR BLASTING. By M. T. Hoster. E. & M. J., vol. 89, p 1006. 2 $\frac{1}{2}$ columns

BLASTING AND PREPARING THE SHOT. By D. H Stovall Min & Sci Press, vol 98, p. 699. 1 $\frac{1}{2}$ columns.

See also TAMPING AND TAMPING MATERIALS.

Use of Compressed Air in Blasting

See first volume of Index.

Arrangement of Holes in Blasting

FIRING OF SHOTS: Order Preferred in Hard Ground. T. Au. I. M. E., vol. 11, p. 161. 1 page

ARRANGEMENT OF HOLES IN DRIFTING IN HARD GROUND. T. Au. I. M. E., vol. 11, p. 158. 3 pages. I

ARRANGEMENT OF HOLES IN DRIVING THE ELIZABETH TUNNEL. M. & M., vol. 31, p. 102. I

ARRANGEMENT OF HOLES IN HEADINGS, WABANA MINES. J. C. M. I., vol. 13, p. 635. I

ARRANGEMENT OF HOLES IN BLASTING. P. C. M. & M. Soc. S. A., vol. 6, p. 42. 8 columns. I.

ARRANGEMENT OF HOLES IN DRIFTING, RAY, NEVADA. M. & M., vol. 29, p. 546. I.

THE LEYNER CUT. Arrangement of Holes in Drifting. M. & M., vol. 30, p. 652. 1 column. I.

ARRANGEMENT OF HOLES IN DRIVING HEADINGS. P. C. M. & M. Soc. S. A., vol. 8, p. 263. $\frac{1}{2}$ column. I

See also **METHODS OF TUNNELING AND SHAFT SINKING.**

Tamping and Tamping Materials

TAMPING DYNAMITE CHARGES. E. & M. J., vol. 85, p. 640. $\frac{1}{2}$ column

TAMPING SHOT HOLES IN COAL MINES. E. & M. J., vol. 87, p. 813. $1\frac{1}{2}$ columns.

SAND TAMPING. P. C. M. & M. Soc. S. A., vol. 6, p. 228. $\frac{1}{2}$ column

THE USE OF STEEL TAMPING BARS. E. & M. J., vol. 86, p. 42. $\frac{1}{2}$ column

ECONOMIC TAMPERS. Prepared Tamping for Blasting. E. & M. J., vol. 86, p. 699. 1 column. I

TAMPING IN BLASTING. E. & M. J., vol. 87, p. 225. $1\frac{1}{2}$ columns

See also **METHODS OF CHARGING AND FIRING EXPLOSIVES.**

Quantity of Explosive That Should Be Used

See first volume of Index.

Large or Mammoth Blasts

Bank-Blasting at Bingham Canyon Utah. Min. & Sci. Press, vol. 98, p. 520. $\frac{1}{2}$ column. I.

MAMMOTH BLASTS IN THE CARIBO HYDRAULIC MINES. Min. & Sci. Press, vol. 95, p. 304. $\frac{1}{2}$ column.

See also **COST OF EXPLOSIVES AND BLASTING.**

Submarine Blasting

See also **COST OF EXCAVATING AND COST OF EXPLOSIVES AND BLASTING**

Lime Blasting

See first volume of Index.

CHEMISTRY: METHODS AND PRACTICE**General**

REPORT OF THE INTERNATIONAL COMMITTEE ON ANALYSIS TO THE SIXTH INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY AT ROME, 1906. P. C. M. & M. Soc. S. A., vol. 7, p. 89. $9\frac{1}{2}$ columns.

THE INDUSTRIAL OUTLOOK FOR PHYSICAL CHEMISTRY. By A. Sang. P. E. Soc. W. Pa., vol. 23, p. 32. 15 pages.

THE TECHNICAL ANALYSIS OF FLUOSPAR. P. C. M. & M. Soc. S. A., vol. 7, p. 52. $\frac{1}{2}$ column.

A SYSTEM OF QUANTITATIVE ANALYSIS FOR THE COMMON ELEMENTS. P. C. M. & M. Soc. S. A., vol. 7, p. 373. $1\frac{1}{2}$ columns.

VALUE OF FLUE-GAS ANALYSIS. E. & M. J., vol. 86, p. 858. $\frac{1}{2}$ column

- GRADING ANALYSES AND THEIR APPLICATION.** By H. Stadler. P. C. M. & M. Soc. S. A., vol. 10, p. 382 16½ columns I.
- GRADING ANALYSES AND THEIR APPLICATION** By H. Stadler. T. I. M. & M., vol. 19, p. 471 15 pages. I..
- SOURCES OF ERROR IN ANALYSES.** By R. C. Benner. Min. & Sci. Press, vol. 100, p. 492 4 columns I.
- GRADING ANALYSES** By E. Stadler. M. & M., vol. 31, p. 344. 11 columns.
- CONTRIBUTIONS TO CHEMISTRY AND MINERALOGY FROM THE LABORATORY OF THE UNITED STATES GEOLOGICAL SURVEY** By F. W. Clarke U. S. G. S., Bull. 167. 166 pages 1900.
- COMBINED OFFICE AND LABORATORY BUILDING.** By E. W. Buskett. E. & M. J., vol. 89, p. 1054. 2½ columns. I.
- MINE LABORATORY WORK AT GARY, WEST VIRGINIA.** By V. Klier M. & M., vol. 31, p. 217. 3½ columns. I.
- TECHNICAL METHODS OF ANALYSIS** By W. A. Seamon. Min. & Sci. Press, vol. 95, p. 249. 3½ columns.
- ANALYTICAL METHODS IN THE CANADIAN LABORATORY.** By F. G. Hawley. E. & M. J., vol. 90, p. 647. 12 columns.
- NEW ANALYTICAL METHODS.** By F. H. Mason. Min. & Sci. Press, vol. 100, p. 683. 2 columns.
- A RAPID METHOD OF QUANTITATIVE ANALYSIS.** P. C. M. & M. Soc. S. A., vol. 9, p. 242. 2 columns.
- NEW METHODS FOR THE PREPARATION OF HYDROGEN SULPHIDE.** P. C. M. & M. Soc. S. A., vol. 7, p. 371 1 column.
- THE ANALYSES OF SOME WITWATERSRAND SOILS.** By E. H. Croghan. P. C. M. & M. Soc. S. A., vol. 5, p. 18, 7 columns; p. 79, 6 columns, p. 97, 6 columns.
- DETECTION OF MERCURY IN NITROGLYCERINE.** P. C. M. & M. Soc. S. A., vol. 9, p. 214. 1½ columns.
- See also **TESTING EXPLOSIVES**
- FRACTIONATION OF CRUDE PETROLEUM BY CAPILLARY FILTRATION.** By D. T. Day. U. S. G. S., Mineral Resources, 1907.
- THE FRACTIONATION OF CRUDE PETROLEUM BY CAPILLARY DIFFUSION.** By J. E. Gilpin and M. P. Cram U. S. G. S., Bull. 365 33 pages 1908.
- RECTIFICATION OF NATURAL SULPHUR WATER.** By F. H. Mason. Min. & Sci. Press, vol. 98, p. 527. 1½ columns.
- See also **METHODS OF DETERMINING SULPHUR.**
- THE SANITARY VALUE OF WATER ANALYSIS.** P. C. M. & M. Soc. S. A., vol. 7, p. 93. ½ column
- LISTS AND ANALYSES OF THE MINERAL SPRINGS OF THE UNITED STATES.** By A. C. Peale. U. S. G. S., Bull. 32. 235 pages. 1886.
- ANALYSES OF WATERS OF THE YELLOWSTONE NATIONAL PARK, WITH AN ACCOUNT OF THE METHODS OF ANALYSIS EMPLOYED.** By F. A. Gooch and J. E. Whitfield. U. S. G. S., Bull. 47. 84 pages. 1888
- See also **POLLUTION AND PURIFICATION OF WATER.**
- THE REDUCTION OF CALCIUM SULPHATE BY CARBON MONOXIDE AND CARBON, AND THE OXIDATION OF CALCIUM SULPHIDE.** By H. O. Hoffman and W. Mostowitsch. T. A. I. M. E., vol. 41, p. 763. 24 pages I.
- CHEMISTRY OF THE BROMO-CYANOGEN PROCESS.** By S. H. Worrell. Min. & Sci. Press, vol. 98, p. 356. 2½ columns
- See also **CYANIDING OF ORES.**
- THE SEPARATION AND IDENTIFICATION OF THE MOST IMPORTANT CONSTITUENTS OF ESSENTIAL OILS.** By A. Hoffman. Sch. Mines Quart., vol. 30, p. 139. 5 pages.
- AUTOXIDATION OF ORGANIC COMPOUNDS.** By K. G. Falk. Sch. Mines Quart., vol. 29, p. 15. 9 pages.

THE INFLUENCE OF MOIST AIR ON QUICKLIME. By J Gray. P. C. M. & M Soc. S. A., vol 9, p 396. 2 columns.

BACTERIA AS AGENT IN THE OXIDATION OF AMORPHOUS CARBON P. C. M. & M Soc. S. A., vol. 9, p 138. $\frac{1}{2}$ column

ENGINEERING CHEMISTRY IN CHEMICAL ENGINEERING By C F Mabery. P Soc. P E. E., vol. 15, p. 68. 10 pages

See also TECHNICAL EDUCATION.

THE UTILIZATION OF ATMOSPHERIC AIR By A. Bernthsen E & M. J., vol 88, p. 773. 11 columns.

GEOCHEMISTRY The Relation between Geology and Chemistry By G T. Halloway M. & M., vol. 30, p. 657, 6 columns; p 757, 4 columns.

THE DATA OF GEOCHEMISTRY By F W Clarke U S G. S., Bull 330 716 pages. 1908.

GEOCHEMISTRY By G. T Halloway M. & M., vol. 31, p 26. 5 columns.

GEOCHEMISTRY P. C. M. & M. Soc S. A., vol. 9, p. 448. 2 columns.

THE INTERACTION BETWEEN MINERALS AND WATER SOLUTIONS, WITH SPECIAL REFERENCE TO GEOLOGIC PHENOMENA. By E. C Sullivan U. S. G. S., Bull. 312, 69 pages. 1907.

See also THEORY OF ORE DEPOSITS.

THE BLOW-PIPE AND ITS USE IN CHEMICAL ANALYSIS. Min Mag., vol 1, p 388, 8 pages, I.; p. 497, 2 pages; vol. 2, p. 153, 2 pages; vol. 3, p. 264, 4 pages; p. 476, 5 pages

See also MEASURES AND WEIGHTS.

Determination of Bismuth, Molybdenum, Mercury, Tellurium, Wolfram, Etc.

AVOLUMETRIC METHOD FOR THE DETERMINATION OF MERCURY. By W. H. Seamon. E. & M. J., vol. 87, p. 1047. 3 columns.

PURIFICATION OF MERCURY. P. C. M. & M. Soc S. A., vol 10, p 224. $1\frac{1}{2}$ columns.

THE JAMES APPARATUS FOR QUICK-SILVER DETERMINATION. By G. A. James E. & M. J., vol 90, p 800. 2 columns. I

A VOLUMETRIC METHOD FOR THE ESTIMATION OF MERCURY FULMINE. P. C. M. & M Soc S. A., vol. 5, p. 86 $1\frac{1}{2}$ columns

EXTRACTION AND USE OF MOLYBDENUM P C. M. & M. Soc S. A., vol. 9, p. 171. 1 column.

DETERMINATION OF MOLYBDENUM IN WULFENITE By J C. Evans. Min. & Sci. Press, vol 97, p. 161. $1\frac{1}{2}$ columns.

DETERMINATION OF ALUNITE. By R. B. Gage E & M. J., vol 87, p. 1122 $5\frac{1}{2}$ columns.

DETERMINATION OF ALUNITE E & M. J., vol. 88, p. 31. 1 column.

DETERMINATION OF ALUNITE E. & M. J., vol 88, p. 743 1 column

VOLUMETRIC DETERMINATION OF URANIUM AND VANADIUM. E. & M. J., vol 87, p. 155. $1\frac{1}{2}$ columns

VOLUMETRIC ESTIMATION OF URANIUM AND VANADIUM Min. & Sci. Press, vol. 100, p. 160. $\frac{1}{2}$ column.

DETERMINATION OF VANADIUM. P. C. M. & M. Soc. S. A., vol. 10, p 294. $1\frac{1}{2}$ columns.

DETERMINATION OF VANADIUM. By Arden M Wilson. E. & M. J., vol. 85, p 962 $1\frac{1}{2}$ columns

COLORIMETRIC ESTIMATION OF SELENIUM P C. M. & M. Soc S. A., vol. 6, p 279. $1\frac{1}{2}$ columns.

DETERMINATION OF TITANIUM. E. & M. J., vol 85, p. 1200. $\frac{1}{2}$ column

VOLUMETRIC METHOD FOR DETERMINING ALUMINA. E. & M. J., vol. 88, p. 1283. 2 columns.

DETERMINATION OF FLUORINE. By C. A. Heberlein. Min. & Sci. Press, vol. 95, p. 591. 1 column. I.

THE ESTIMATION OF GRAPHITE. P. C. M. & M. Soc. S. A., vol. 9, p. 128. 1 column.

CHEMISTRY OF MANGANESE. By E. C. Harder. U. S. G. S., Bull. 427. 208 pages. I

ANALYSES OF SAMPLES OF ASPHALTITE T. A. I. M. E., vol. 40, p. 280. Tables.

ANALYSIS OF GAS COAL Min. Mag., vol. 6, p. 15. 11½ pages

VOLUMETRIC DETERMINATION OF MAGNESIUM. Min. & Sci. Press, vol. 96, p. 571 ½ column.

QUANTITATIVE FIELD-TEST FOR MAGNESIA IN CEMENT-ROCK AND LIMESTONE By C Catlett T. A. I. M. E., vol. 38, p. 705. 4 pages.

THE DETECTION AND IDENTIFICATION OF MANGANESE AND CHROMIUM E & M J., vol. 86, p. 322. ½ column

METHOD OF ANALYZING ATACAMITE By F. D. Aller. E. & M J., vol. 89, p. 1006. ½ column.

A NEW RAPID VOLUMETRIC METHOD FOR THE DETERMINATION OF NIOBIUM IN THE PRESENCE OF TANTALUM AND ITS APPLICATION TO THE ANALYSES OF NIOBIUM MINERALS By F. J Metzger and C. E Taylor. Sch Mines Quart., vol. 30, p. 323 12 pages.

Acid Manufacture

THE MANUFACTURE OF SULPHURIC ACID AND ITS USES IN METALLURGY By W. H. Mandsley. T. Au I. M. E., vol. 6, p. 93. 32 pages.

SULPHURIC ACID LEAD CHAMBER CONSTRUCTION. By F. J Falding. E & M. J., vol. 88, p. 441. 11½ columns. I.

SMELTERY SMOKE AS A SOURCE OF SULPHURIC ACID. By W H Free-land and C. N Renwick E. & M. J., vol. 89, p. 1116 10½ columns. I.

DETERMINATION OF SULPHURIC ANHYDRIDE IN SULPHURIC ACID. By E. W. Buskett. E. & M J., vol. 86, p. 407. 1½ columns

THE MANUFACTURE OF NITRIC ACID FROM AIR. E. & M. J., vol. 88, p. 65 1 column

Mineral Analysis

DETERMINATION OF SILICA. Min. & Sci Press, vol. 99, p. 559. ½ column.

THE CONSTITUTION OF THE SILICATES. By F. W. Clarke U. S. G. S., Bull. 125. 109 pages. 1895.

THE ACTION OF AMMONIUM CHLORIDE UPON SILICATES By F. W. Clarke and G. Steiger. U. S. G S, Bull. 207. 57 pages. 1902.

THE ANALYSIS OF SILICATE AND CARBONATE ROCKS. By W. F. Hillebrand. U. S. G. S., Bull. 422. 239 pages 1910.

THE ANALYSIS OF SILICATE AND CARBONATE ROCKS By W. F. Hillebrand. U. S. G. S., Bull. 305. 200 pages. 1906.

CHEMICAL ANALYSES OF IGNEOUS ROCKS, WITH A CRITICAL DISCUSSION OF THE CHARACTER AND USE OF ANALYSES By H. S. Washington. U. S. G. S., Professional Paper 14. 495 pages 1903.

CHEMICAL COMPOSITION OF IGNEOUS ROCKS EXPRESSED BY MEANS OF DIAGRAMS, WITH REFERENCE TO ROCK CLASSIFICATION ON A QUANTITATIVE CHEMICO-MINERALOGICAL BASIS. By J. P. Iddings. U. S. G. S., Professional Paper 18. 98 pages. I. 1903.

THE SUPERIOR ANALYSES OF IGNEOUS ROCKS FROM ROTH'S TABELLEN, 1869 TO 1884, ARRANGED ACCORDING TO THE QUANTITATIVE SYSTEM OF CLASSIFICATION By H. S. Washington. U. S. G. S., Professional Paper 28 68 pages. 1904.

SOME PRINCIPLES AND METHODS OF ROCK ANALYSIS. By W F. Hillebrand. U. S. G S., Bull. 176. 114 pages. 1900.

MINERAL ANALYSES FROM THE LABORATORIES OF THE UNITED STATES GEOLOGICAL SURVEY, 1880-1903. By F. W. Clarke. U. S. G. S., Bull. 220. 119 pages. 1903.

ANALYSES OF ROCKS, WITH A CHAPTER ON ANALYTICAL METHODS, 1880 TO 1896. By F. W. Clarke and W. F. Hillebrand. U. S. G. S., Bull. 148. 306 pages. 1897.

ERRORS IN THE CHEMICAL ANALYSIS OF GYPSUM. By G. Steiger. U. S. G. S., Bull. 413. 37 pages. I. 1910.

ANALYSES OF ROCKS By F. W. Clarke. U. S. G. S., Bull. 168, 308 pages, 1900, Bull. 228, 375 pages, 1904; Bull. 419, 323 pages, 1910.

Determination of Antimony, Arsenic, etc.

ARSENIC DETERMINATION. M. & M., vol. 29, p. 508. 1 column.

RAPID ESTIMATION OF ARSENIC. E. & M. J., vol. 87, p. 945. 2 columns

A RAPID METHOD FOR THE ESTIMATION OF ARSENIC IN ORES. By H. E. Hooper. T. I. M. & M., vol. 17, p. 331. 2½ pages.

DETERMINATION OF ANTIMONY AND ARSENIC IN ALLOYS. E. & M. J., vol. 85, p. 1278. 1½ columns.

SEPARATION OF ARSENIC AND ANTIMONY BY MEANS OF KNORR DISTILLATION APPARATUS. By W. C. Smith. E. & M. J., vol. 88, p. 1062. 2 columns. I.

NEW METHOD FOR DETERMINING ANTIMONY. E. & M. J., vol. 88, p. 209. 1 column.

VOLUMETRIC DETERMINATION OF ANTIMONY. M. & M., vol. 29, p. 476. 1 column.

DETERMINATION OF ANTIMONY. E. & M. J., vol. 87, p. 497. 1½ columns.

VOLUMETRIC ESTIMATION OF ANTIMONY. P. C. M. & M. Soc. S. A., vol. 7, p. 297. 2 columns.

DETERMINATION OF TIN AND ANTIMONY. By E. B. Van Osdel. E. & M. J., vol. 87, p. 850. ½ column

Methods of Determining Sulphur

DETERMINATION OF SULPHUR. By A. C. De Jough. E. & M. J., vol. 85, p. 112. ½ column

DETERMINATION OF SULPHUR AND ARSENIC. E. & M. J., vol. 85, p. 1048. ½ column

EFFECT OF PRESSURE ON THE BOILING POINT OF SULPHUR. P. C. M. & M. Soc. S. A., vol. 9, p. 249. 1 column.

NOTE ON A DEPOSIT OF SULPHUR IN A COLLIERY WATER. By G. H. Stanley. T. I. M. E., vol. 36, p. 223. 4 pages.

See also CHEMISTRY. METHODS AND PRACTICE.

Gold and Silver Analysis

PLATTNER'S TEST FOR GOLD ORES. Min. Mag., vol. 6, p. 52. 2 pages

DETERMINATION OF GOLD IN AURIFEROUS SANDS BY THE WET METHOD. P. C. M. & M. Soc. S. A., vol. 7, p. 374. ½ column.

METHOD FOR ANALYSIS OF GOLD-SILVER BULLION. P. C. M. & M. Soc. S. A., vol. 8, p. 86. 5 columns

DETERMINATION OF GOLD IN COPPER BULLION. By F. F. Hunt. E. & M. J., vol. 87, p. 465. ½ column

THE ANALYSIS OF CHLORIDIZED ORES. By P. J. Thibault. T. I. M. E., vol. 7, p. 72. 10 pages

See also the CHLORINATION PROCESS.

Paint Manufacture

BLAIR'S ZINC-LEAD PIGMENT PLANT. By J. I. Blair. M. & M., vol. 31, p. 698. 4½ columns. I.

THE USE OF COBALT OXIDE FOR MAKING PIGMENTS. By J. J. McEachern. J. C. M. I., vol. 13, p. 605. 15½ pages.

TESTS FOR PAINTS. P. C. M. & M. Soc. S. A., vol. 7, p. 51. 1 column.

ZINC OXIDE MANUFACTURE. By W. F. Gordon Min. & Sci. Press, vol. 100, p. 390. 1½ columns.

SOUTHERN RED HEMATITE AS AN INGREDIENT OF METALLIC PAINT. By E. F. Burchard. U. S. G. S., Bull. 315, p. 430. 5 pages. 1906.

SOME IMPORTANT PAINT TESTS By G. B. Heckel E & M J., vol. 85, p. 1099. 1 column

Methods of Determining Lead

VOLUMETRIC ESTIMATION OF LEAD. E. & M. J., vol. 86, p. 77 1 column

RAPID DETERMINATION OF LEAD IN CHILLED BLAST-FURNACE SLAGS By F. S. Schrimmerka E. & M. J., vol. 89, p. 467. 2½ columns.

DETERMINATION OF LEAD AND CADMIUM IN SPELTER. By E. J. Ericson. E. & M. J., vol. 87, p. 1036. 3 columns.

PEROXIDE METHOD FOR DETERMINING LEAD E. & M. J., vol. 87, p. 262. 1½ columns.

DETERMINATION OF LEAD IN SPELTER AND IN ORES. By E. J. Ericson E & M J., vol. 86, p. 178. 6 columns.

DETERMINATION OF LEAD IN NICKEL ORES. Min & Sci. Press, vol. 97, p. 129. ½ column.

ELECTROLYTIC DETERMINATION OF LEAD IN ORES. By R. C. Benner and W. H. Ross. Min. & Sci. Press, vol. 101, p. 642 3½ columns. D.

THE LITHARGE METHOD. P. C. M. & M. Soc. S. A., vol. 8, p. 154. 1½ columns.

Methods of Determining Zinc

CONTRIBUTIONS TO THE CHEMISTRY OF ZINC SMELTING. E. & M. J., vol. 88, p. 604. 1 column.

ANALYSIS OF MINERALS CONTAINING ZINC. P. C. M. & M. Soc. S. A., vol. 7, p. 372. 1½ columns

DELICATE METHOD OF PRECIPITATING ZINC. P. C. M. & M. Soc. S. A., vol. 7, p. 298. Note

ELECTROLYTIC DETERMINATION OF ZINC. E. & M. J., vol. 86, p. 372. 1½ columns.

A STUDY OF THE FERROCYANIDE METHOD FOR THE DETERMINATION OF ZINC P. C. M. & M. Soc. S. A., vol. 7, p. 373. 2 columns.

Chemical Analysis in Cyaniding

CHEMISTRY OF THE CYANIDE PROCESS. By W. H. Seamon. M. & M., vol. 31, p. 689. 2½ columns.

THE ESTIMATION OF SULPHO- AND FERROCYANIDES, ETC, IN CYANIDE SOLUTIONS CONTAINING COPPER. By L. M. Green. T. I. M. & M., vol. 18, p. 59. 7 pages.

ERRORS DUE TO THE PRESENCE OF POTASSIUM IODIDE IN TESTING CYANIDE SOLUTIONS FOR PROTECTIVE ALKALINITY. By B. Collingridge. T. I. M. & M., vol. 19, p. 299. 12 pages.

ERRORS IN TESTING CYANIDE SOLUTIONS. E. & M. J., vol. 89, p. 1101. 1½ columns

RAPID ANALYSIS OF COMMERCIAL CYANIDE. By R. Bell. E & M. J., vol. 89, p. 1114. 3½ columns.

METHOD FOR DETERMINING POTASSIUM IN SODIUM CYANIDE. By J. E. Clennel. E. & M. J., vol. 89, p. 1309. 1 column.

DUTIES OF THE CYANIDE CHEMIST. E & M. J., vol. 86, p. 759. 2½ columns.

THE CHEMISTRY OF SILVER SULPHIDE CYANIDATION. By W. A. Caldecott. E. & M. J., vol. 85, p. 1295. 2 columns.

COMMERCIAL POTASSIUM CYANIDE. E. & M. J., vol. 89, p. 1307. 4 columns.

COMMERCIAL SODIUM AND POTASSIUM CYANIDE. By W. J. Sharwood. E. & M. J., vol. 89, p. 614. 5½ columns.

SPURIOUS POTASSIUM CYANIDE E & M J, vol 89, p 156. 2½ columns

See also CYANIDING OF ORES.

DETERMINATION OF ALKALINITY M. & M, vol 31, p 478 1½ columns.

TITRATING FOR PROTECTIVE ALKALINITY By H. L. Sulman and F. Reade. M. & M., vol. 31, p 479 1 column.

THE ACID SPECIFIC-GRAVITY TEST. By A Langerfeld M & M., vol. 31, p. 62 5 columns.

See also CYANIDING GOLD, ETC

Determination of Cobalt, Nickel, Tungsten, and Tin

DETERMINATION OF NICKEL E & M J., vol. 85, p 910 ½ column.

ELECTROLYTIC DETERMINATION OF NICKEL By V. P Davis E. & M. J., vol 87, p 590. 1 column.

See also ELECTROLYTIC ANALYSIS

A NEW DIRECT METHOD FOR DETERMINING NICKEL IN STEEL. By H. Grossmann and W. Heilborn E. & M. J, vol. 87, p 912. 1½ columns.

DICYANDIAMIDE IN THE DETERMINATION AND SEPARATION OF NICKEL By H Grossmann and B Schueck. E. & M. J., vol. 85, p. 1044. 2 columns.

QUANTITATIVE ANALYSIS OF NICKEL IN COBALT. P. C M & M. Soc. S A, vol. 8, p. 221 1 column

VOLUMETRIC DETERMINATION OF COBALT. E & M. J, vol 88, p. 256. 1½ columns.

VOLUMETRIC DETERMINATION OF TUNGSTEN. E & M. J., vol. 89, p. 382 ½ column

THE DETERMINATION OF TUNGSTIC ACID IN LOW-GRADE ORES. E. & M. J., vol. 87, p 1141. 2½ columns.

THE DETERMINATION OF TUNGSTIC ACID IN LOW-GRADE WOLFRAM ORES By H W. Hutchin and F. J Tonks. T. I. M. & M., vol. 18, p 425. 14 pages.

ANALYSIS OF BABBITT METAL. E. & M J, vol. 88, p. 677. 1½ columns

A RAPID METHOD OF BABBITT METAL ANALYSIS P C. M & M. Soc. S. A, vol. 7, p. 50. 1 column.

Coal Analysis

ACCURACY OF COAL ANALYSIS. P. C. M & M Soc S A, vol. 9, p. 132. 2 columns

ANALYSES OF BERING RIVER COALS, ALASKA E & M. J, vol 90, p. 272. Table

THE ANALYSIS OF COAL. By N W. Ford. M. & M, vol. 30, p 85. 5½ columns

ANALYSIS OF WEST VIRGINIA COALS. M & M, vol. 29, pp 305, 306, and 307. Tables.

CHEMICAL ANALYSES OF COALS TESTED AT THE UNITED STATES FUEL-TESTING PLANT, NORFOLK, VIRGINIA. By J S Buitows U. S G S, Bull 362. 23 pages. 1908.

See also TESTING FUELS AND THEIR VALUE.

METHODS OF ANALYZING ILLINOIS COALS. T A. I. M E., vol 40, p. 21 3 pages.

ANALYSIS OF ILLINOIS COALS. T A. I. M. E, vol. 40, p. 5. 1 page. Tables; pp. 22 and 23.

CHEMICAL CONTROL OF COAL WASHERS By R. Bolling E. & M J, vol 86, p. 424 8 columns I.

THERMOCHEMISTRY OF ANTHRACITE. M & M., vol. 30, p 603. 4 columns.

ESTIMATION OF ASH IN COKE By H E Hooper E. & M. J, vol 87, p. 899 1½ columns.

See also COKE: ITS PROPERTIES AND MANUFACTURE.

Methods of Determining Copper

VOLUMETRIC DETERMINATION OF COPPER M. & M., vol. 30, p. 260. ½ column.

- A NEW VOLUMETRIC METHOD FOR COPPER AND THE ORES OF COPPER** By A. Adair. P. C. M. & M. Soc. S. A., vol 6, p 188, 4 columns; p. 275, 1 column
- A NEW VOLUMETRIC ASSAY FOR COPPER** E. & M. J., vol. 85, p. 1197. 2 columns.
- IODOMETRIC DETERMINATION OF COPPER** E & M J., vol 85, p. 604. 1 column.
- PERMANGANATE METHOD FOR DETERMINING COPPER.** By F. G. Hawley. E. & M. J., vol. 86, p. 1155. 2½ columns.
- THIOCYANATE DETERMINATION OF COPPER** By W. Tsukakaski. E & M. J, vol 90, p. 969 1½ columns.
- RAPID ELECTROLYTIC DETERMINATION OF COPPER** By R. C Benner. E & M J., vol 90, p. 517. 5½ columns. I.
- THE DETERMINATION OF COPPER IN COPPER-BISMUTH ORES.** By C C. O'Loughlin. Min. & Sci. Press, vol. 101, p. 238. ¾ column.
- THE ELECTROLYTIC DETERMINATION OF COPPER AT TENNESSEE COPPER COMPANY.** By T. W. Cavers and J. P Chadwick. E. & M. J, vol. 89, p. 954. 3 columns.
- COMPARISON OF THE IODIDE CYANIDE AND ELECTROLYTIC METHODS FOR COPPER** E. & M J, vol. 87, p. 159 1½ columns
- THE EFFECT OF THE PRESENCE OF CERTAIN "ADDITION-AGENTS" UPON THE DENSITY AND THE COHERENCE OF ELECTROLYTICALLY DEPOSITED COPPER, LEAD AND SILVER.** By R. P. Jarvis and E. F. Kern. Sch. Mines Quart, vol. 30, p. 100. 29 pages. I
- See also **ELECTROLYTIC ANALYSIS**
- RAPID METHOD FOR DETERMINING COPPER IN SLAGS.** By F. D. Aller. E. & M. J., vol. 88, p. 1278. 1½ columns.
- RAPID METHOD OF DETERMINING COPPER IN SLAGS.** By A. W. Diack and T. Smith. E & M. J, vol. 89, p. 553. 2 columns.
- DETERMINATION OF SMALL QUANTITIES OF COPPER IN SLAG** By C. A. Heberlein E & M. J, vol. 89, p. 306. 1 column.
- DETERMINATION OF COPPER** E & M. J., vol. 87, p. 1041. 1 column.
- A DELICATE COLOR REACTION FOR COPPER** P. C. M. & M. Soc S A., vol. 7, p 296. ¼ column
- SOME ANALYSES OF COPPER BLAST-FURNACE SLAGS AND DETERMINATION OF THEIR MELTING POINTS.** By A. T. French. T. I M. & M, vol 19, p 263 12 pages. D.
- See also **METALLURGY OF COPPER.**
- ### Electrolytic Analysis
- RAPID ELECTROLYTIC METHOD OF ANALYSIS.** By R. C. Benner Min. & Sci. Press, vol. 101, p 576. 3 columns.
- ELECTROLYTIC DETERMINATION OF BISMUTH.** E. & M J., vol 86, p. 115 ½ column.
- ELECTROCHEMICAL ANALYSIS WITH ROTATING ANODES.** E & M. J, vol. 85, p. 956. 2 columns
- A NEW APPARATUS FOR ELECTROLYTIC DETERMINATION OF METALS.** E. & M. J., vol. 86, p. 314. 1½ columns.
- See also **METHODS OF DETERMINING COPPER.**
- ### Methods of Determining Iron
- ANALYSES OF THE CLINTON IRON-ORE OF ALABAMA.** T A I M. E, vol 40, p. 86. Table.
- ANALYSES OF THE CLINTON IRON-ORES, HUNTINGDON COUNTY, PENNSYLVANIA.** T. A. I. M E., vol. 40, p. 143. 2 pages. Tables.
- ANALYSES OF CLINTON OÖLTIC IRON-ORE, NEW YORK STATE.** T. A. I. M. E., vol. 40, p. 174. Table.

DETERMINATION OF IRON IN BRASS AND BRONZE E & M. J., vol. 88, p 1269. 1 column.

TESTS OF IRON Chemical Analysis. Min Mag., vol 3, p. 25. 4 pages.

THE STANDARDIZATION OF POTASSIUM PERMANGANATE SOLUTION AND ITS

SUBSEQUENT USE IN TITRATING IRON By C. Offerhaus and E H Fischer. Sch Mines Quart, vol 30, p 40. 4 pages

THE FERRITES, COMPOUNDS OF AN IRON ACID By J. S. C. Wells E. & M. J., vol. 86, p. 420 6 columns

COMPRESSED AIR IN MINING

General

SIMPLE PROBLEMS IN AIR-COMPRESSION By E A Rix Min & Sci Press, vol 96, p 394. 7½ columns

COMPRESSED AIR CALCULATION SHORT CUTS By S B. Redfield E & M J, vol. 88, p. 1163. 3½ columns. D

STORING COMPRESSED AIR IN A NATURAL ROCK RECEIVER. E & M J, vol. 89, p 406 1 column.

COMPRESSED AIR IN MINES By W L Saunders. E & M J, vol 89, p 500. 3 columns

See also COMPRESSED AIR PUMPING AND COMPRESSED AIR HAULAGE.

MOISTURE IN THE ATMOSPHERE AND ITS EFFECT ON THE OPERATION OF COMPRESSED AIR MACHINERY By H. M P. Murphy. Min. & Sci Press, vol. 97, p 257. 7½ columns. Tables.

OIL HEATER FOR COMPRESSED AIR Min. & Sci. Press, vol 100, p 929 1½ columns. I.

AIR ECONOMY IN ROCK DRILLS By A. West. E. & M. J., vol. 87, p 895. 3 columns. I.

See also MACHINE DRILLS.

HIGH vs. LOW PRESSURE FOR COMPRESSED AIR IN MINES. By Robt. B. Brinsmade. E. & M. J., vol. 85, p. 161. 3½ columns.

TEST ON A MODERN AIR-COMPRESSING PLANT AT THE LONG TUNNEL GOLD MINE, WALHALLA, AUSTRALIA. By E. J. Rigby. T. Au. I. M. E., vol. 5, p. 259. 17 pages. I.

LOSS OF OXYGEN IN HYDRAULIC AIR COMPRESSION. By O H. Landreth. E & M J, vol 90, p. 508 1 column.

STEAM CONSUMPTION OF AIR COMPRESSORS. By W. A. Macleod and J. P Wood T. Au I. M E, vol. 12, p 165. 16 pages. D.

POWER AT COBALT. E & M J, vol. 88, p 171 1½ columns

INEFFICIENCY OF COMPRESSED AIR SYSTEM, RAND MINES E. & M J, vol 85, p. 549. 1½ columns

THE TRANSMISSION OF POWER BY COMPRESSED AIR IN MINES. By R. W. Chapman T. Au I M E., vol. 10, p. 309. 17 pages.

See also POWER TRANSMISSION, ETC.

See also COMPRESSED AIR PUMPING.

See also CYANIDING GOLD, ETC, and COST OF POWER

Air Compressors, Types, Operation, Etc.

SMALL AIR COMPRESSORS AT MINES. M. & M., vol. 31, p 477. 1 column.

TWO-STAGE AIR-LIFT COMPRESSOR Min. Mag, vol 4, p. 141. 1 column. I.

CENTRIFUGAL AIR COMPRESSOR. M. & M., vol. 29, p. 279. 1½ columns. I.

TURBOBLOWERS AND COMPRESSORS. M. & M., vol. 31, p. 285. 3 columns. I.

AIR COMPRESSING MACHINERY By J. Savaas. T. Au. I. M. E., vol 8, pt. 2, p. 215. 12½ pages. I

ELECTRIC AIR COMPRESSOR By J. A. SEAGER. M & M., vol 31, p. 263. 1 column. I.

IMPROVEMENTS IN COMPRESSOR VALVES. E & M J., vol 88, p. 915. 2½ columns. I.

AIR COMPRESSOR VALVES E & M. J, vol. 88, p. 1180. 2 columns.

A CENTRAL COMPRESSED-AIR SCHEME Min. & Sci. Press, vol. 97, p. 537. 1½ columns.

DESCRIPTION OF THE COMPRESSED AIR ENGINE AT GOVAN COLLIERY By W. C. Randolph Min. Mag., vol. 9, p 51. 2½ pages.

SOME AIR COMPRESSOR TESTS By W. A. Macleod and J. P. Wood. T. Au. I. M. E., vol. 13, p. 59. 2 pages. D.

Hydraulic Air Compression and Compressors

HYDRAULIC AIR COMPRESSOR. P. C. M. & M. Soc. S. A., vol. 8, p 132. ½ column

EFFICIENCY OF HYDRAULIC AIR COMPRESSION. E & M. J., vol. 86, p. 228. 2 columns. I

COMPRESSED AIR BY WATER By G. C McFarlane. Min. & Sci Press, vol 100, p 281. 6½ columns. I.

McFARLANE HYDRAULIC COMPRESSOR. E & M. J, vol. 86, p. 716. 1½ columns. I.

BLAKNEY HYDRAULIC AIR COMPRESSOR. E. & M. J, vol. 87, p. 841. ½ column. I.

HYDRAULIC AIR COMPRESSION. By E. B Wilson. M. & M., vol 31, p 129. 4½ columns. I.

COBALT HYDRAULIC AIR COMPRESSOR. By C H. Taylor. M. & M., vol 30, p 532 5 columns. I.

Compressed Air Haulage

NEW COMPRESSED AIR LOCOMOTIVE. E. & M. J, vol. 89, p 1187. 2 columns. I.

Explosion in Air Compressors, Diseases, Etc.

DISTASTROUS AIR EXPLOSIONS: Explosions in Air Compressors. M. & M., vol 31, p 683. ½ column.

See also CAUSES OF ACCIDENTS.

EXPLOSION IN COMPRESSED-AIR MAIN. By J. A Burgess. Min. & Sci. Press, vol. 97, p. 253. ½ column I

CLAYS AND THEIR USES

General

A BIBLIOGRAPHY OF CLAYS AND THE CERAMIC ARTS. By J. C. Branner. U. S. G. S., Bull. 143. 114 pages. 1896.

TECHNOLOGY OF CLAY INDUSTRY. By H. Ries. U. S. G. S., 16th Ann. Rept, pt. 4. 52 pages.

CHINA-CLAY: Its Nature and Origin. By G. Hickling. T. I. M. E., vol. 36, p. 10. 25 pages. I.

CLAY PRODUCTS SECTION OF THE TECHNOLOGIC BRANCH OF THE UNITED STATES GEOLOGICAL SUR-

VEY. By A. V. Bleining. P. E. Soc. W. Pa., vol. 25, p. 565. 38 pages. D.

See also OCCURRENCE OF WORKABLE CLAYS.

Properties of Clays and Methods of Testing

CHINA-CLAY. Its Nature and Origin. By G. Hickling. T. I. M. E., vol. 36, p. 10. 25 pages. I.

THE COLLOID MATTER OF CLAY. By H. E. Ashley U. S. G. S., Bull. 388. 65 pages I. 1909.

EFFECT OF TANNIN ON CLAY. By H. Ries. U. S. G. S., Mineral Resources, 1902.

CLAY MINING AND COAL MINING By R. R. Hice. M & M., vol 30, p. 223. 4½ columns

See also OCCURRENCE OF WORKABLE CLAYS.

Brick and Clay Products

SAND-LIME BRICK INDUSTRY By S. V Peppel. U. S. G. S., Mineral Resources, 1903. 23 pages.

SAND LIME BRICKS. By H. Gerlings P. C. M. & M. Soc. S. A., vol 5, p. 124 7 columns, p 155, ½ column; p 205, ½ column; p 229, 6½ columns

See also MINING DISTRICTS.

CONCENTRATION

General

CONCENTRATION METHODS EMPLOYED IN AUSTRALIA. T. Au. I. M. E., vol 12, p. 105. 26 pages Flow sheets.

ORE CONCENTRATION. P. C. M. & M. Soc. S. A., vol. 8, p 393. 2 columns.

ON DRESSING OF ORES. Min Mag, vol. 9, p. 56 4 pages; vol. 8, p. 535, 3 pages.

DEVELOPMENTS IN GOLD-EXTRACTING MACHINERY, AND SOME CAUSES OF FAILURE. By J. W. Jaffray. T. Au. I. M. E., vol. 4, p. 56. 38 pages.

SILVER AND THE PRESENT STATE OF ITS WINNING FROM ARGENTIFEROUS ORES. By A. Trippel Min. Mag., vol 4, p. 153, 17½ pages; p. 327, 12 pages.

See also CYANIDING OF ORES.

CALCULATION OF RECOVERY IN CONCENTRATION. By T. J. Hoover. E. & M. J., vol. 89, p. 1234 4 columns.

CALCULATION OF RECOVERY IN CONCENTRATION. E. & M. J., vol 90, p. 301. 1½ columns. Table.

CALCULATION OF PERCENTAGE OF RECOVERY. By T. J. Hoover. Min. Mag., London, vol 3, p. 119. 7½ columns. D.

TREATMENT PROBLEM OF THE REPUBLIC (WASHINGTON) GOLD ORES. By F. Cirkel. E. & M. J., vol 85, p. 246. 4½ columns.

MEASUREMENT OF PULP AND TAILING. By W. J. Sharwood. Min. Mag, London, vol 2, p 45 18 columns I.

TESTING MILL-TAILING. By W. E. Darrow Min & Sci. Press, vol. 95, p. 301 2 columns.

ELIMINATING DUST FROM ANTHRACITE BREAKER By J. J. Jones. E & M J, vol 89, p. 733. 5 columns I.

See also THE WASTE OF COAL AND ITS UTILIZATION.

GOOD MANAGEMENT AND ORE-DRESSING BY AUTOMATIC MACHINERY. By H. W. F. Kayser. T. Au. I. M. E., vol. 2, p. 98. 7 pages. I.

See also MANAGEMENT OF MINES.

WITTS' FRICTION PROCESS OF ORE-DRESSING P. C. M. & M. Soc. S. A., vol. 7, p 14 5 columns. I.

See also COST OF MILLING

Preparation of Coal

COAL-WASHING PLANT OF THE STAG CAÑON FUEL CO.'S OPERATIONS, NEW MEXICO. T. A. I. M. E., vol. 40, p 363. 8 pages. I

COAL-TESTING IN THE UNITED STATES. P. C. M. & M. Soc. S. A., vol. 7, p. 193. 4 columns

See also TESTING PLANTS.

COAL WASHERY PLANT CONTROL. By G. R. Delamater. M. & M., vol. 30, p. 55. 7 columns. I.

See also WASHING COAL AND MINERAL.

PARABOLIC COAL PICKING PLATE. M. & M., vol. 30, p. 597 $\frac{1}{2}$ column. I.

A NEW SEPARATOR FOR THE REMOVAL OF SLATE FROM COAL. By W. S. Ayres. T. A. I. M. E., vol. 40, p. 648. 7 pages. I.

CLEANING COAL BY THE DRY PROCESS. M. & M., vol. 30, p. 335. 2 columns. I.

See also DRY CONCENTRATION.

THE BEAVER BROOK BREAKER. By T. M. Dodson. M. & M., vol. 30, p. 706. $6\frac{1}{2}$ columns. I.

THE TAYLOR CONCRETE BREAKER. By E. B. Wilson. M. & M., vol. 31, p. 272. $1\frac{1}{2}$ columns. I.

THE PECK SHAFT BREAKER. By E. B. Wilson. M. & M., vol. 31, p. 513. 6 pages. I.

THE RECOVERY OF ANTHRACITE FROM CULM BANKS. By R. Lee. E. & M. J., vol. 85, p. 720. 7 columns. I.

See also PACKING MINE WORKINGS.

Testing Plants and Laboratories

ORE TESTING AT SALT LAKE. By E. Gayforth. Min. & Sci. Press, vol. 96, p. 134. 4 columns. I.

THE CALIFORNIA ORE TESTING COMPANY. Equipment of Plant and Flow-sheet. Min. & Sci. Press, vol. 95, p. 273. 2 columns. I.

Theory of Concentration

NOTES ON MILLING. By W. Beaver. P. C. M. & M. Soc. S. A., vol. 6, p. 215, 5 columns; p. 253, $2\frac{1}{2}$ columns; p. 275, $2\frac{1}{2}$ columns; p. 315, 1 column; p. 341, 1 column; p. 365, 5 columns. I.

THEORY OF THE SETTLEMENT OF SLIME. P. C. M. & M. Soc. S. A., vol. 10, p. 149. 3 columns.

THEORY OF THE SETTLEMENT OF SLIMES. By H. G. Nichols. Min. & Sci. Press, vol. 97, p. 54 $4\frac{1}{2}$ columns. D.

THEORY OF THE SETTLEMENT OF SLIMES. By H. E. Ashley. Min. & Sci. Press, vol. 98, p. 831 4 columns. D.

THEORY OF CLASSIFICATION. E. & M. J., vol. 89, p. 570. 7 columns.

THEORY OF COAL WASHING. P. E. Soc. W. Pa., vol. 23, p. 203 18 pages. I.

See also PREPARATION OF COAL and WASHING COAL AND MINERAL.

FREE AND HINDERED SETTLING OF MINERAL GRAINS. By A. O. Christensen. E. & M. J., vol. 88, p. 503. 18 columns. I.

DEVELOPMENT OF HINDERED-SETTLING APPARATUS. By R. H. Richards. T. A. I. M. E., vol. 41, p. 396. 58 pages. I.

VELOCITY OF GALENA AND QUARTZ FALLING IN WATER. By R. H. Richards. T. A. I. M. E., vol. 38, p. 210. 26 pages. I.

SUBSIDIENCE OF FINE PARTICLES IN LIQUIDS. By C. Barus. U. S. G. S., Bull. 36. 54 pages. 1886.

A NEW METHOD OF OBTAINING THE DENSITY OF SETTLED SAND. By D. I. R. Simpson. P. C. M. & M. Soc. S. A., vol. 7, p. 158. 2 columns. I.

SPECIFIC GRAVITY OF CONCENTRATE. By E. B. Van Osdel. Min. & Sci. Press, vol. 98, p. 667. $\frac{1}{2}$ column.

SOLUTIONS OF HIGH SPECIFIC GRAVITY. P. C. M. & M. Soc. S. A., vol. 6, p. 278. Note.

THE THOULET SOLUTION IN ORE TESTING. By H. B. Hallowell. M. & M., vol. 30, p. 531. $1\frac{1}{2}$ columns. I.

VOIDS IN SAND AND BROKEN STONE. Min. & Sci. Press, vol. 101, p. 579. $\frac{1}{2}$ column.

MINERAL RELATIONS FROM THE LABORATORY VIEWPOINT. By A. L. Day. Min. & Sci. Press, vol. 100, p. 680. $\frac{1}{2}$ column.

See also TESTING PLANTS AND LABORATORIES

EXPERIMENTAL WORK IN ORE CONCENTRATION By J. A. Davis. E. & M. J., vol. 86, p. 904. 7 columns. I.

GRAPHIC METHODS FOR CONCENTRATION. By W. J. Sharwood. Min. Mag., London, vol. 3, p. 428. 2½ columns.

Launders and Distributors

LAUNDERS IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 823. 1½ columns.

THE CARRYING CAPACITY OF LAUNDERS. By W C Browning M. & M., vol. 29, p. 300 5 columns. I.

PULP DISTRIBUTOR IN THE JOPLIN DISTRICT. E. & M. J., vol. 89, p. 953. 1 column. I.

See also PIPES AND PIPE FITTINGS.

Jigs and Jigging

THE FIRST JIG USED IN CLEANING ANTHRACITE COAL. Coal Mining Supplement, E & M. J., vol. 88, p. 3. 1 column.

FIRST PRACTICAL APPLICATION OF THE FOUST JIG. By Doss Brittain. E & M. J., vol. 85, p. 1089. 5½ columns. I.

THE JIG AS A HINDERED SETTLING APPARATUS. J. C. M. I., vol. 13, p. 520. 26 pages. I.

See also CLASSIFIERS AND CLASSIFICATION.

EXPERIMENTAL STUDIES ON THE WORK OF WATER JIGS. By N. V. Hansell E. & M. J., vol. 85, p. 641. 5 columns. I.

HYDRAULIC JIGS AS USED IN SARDINIA. T. A. I. M. E., vol. 39, p. 81. 3½ pages. I.

COAL WASHING JIGS. P. E. Soc. W. Pa., vol. 23, p. 202 19 pages. I

See also PREPARATION OF COAL and WASHING COAL and MINERAL.

PULSATORS IN DIAMOND TREATMENT: Jigs. P. C. M. & M. Soc. S A, vol. 7, p. 229. 1½ columns.

THE CLASSIFYING JIG IN USE AT THE BUNKER HILL MILL. Min. Mag., London, vol. 2, p. 367. 2½ columns. I.

THE HANCOCK JIG IN LEAD CONCENTRATION. Min. & Sci. Press, vol. 101, p. 806. 2 columns. I

THE TAYLOR VIBRATOR FOR ORE JIGS. T. I. M & M., vol. 18, p. 2. 23 pages. I

THE HAZELTON PLUNGER JIG. M & M., vol. 31, p. 621. 2 columns. I.

JIGS EMPLOYED AT THE CŒUR D'ALENE MILLS E & M J, vol. 89, p 375. 7½ columns. I.

BULL JIG ROUGHER IN A JOPLIN ZINC MILL. By L L Wittich. E & M. J, vol. 89, p. 1214. 1 column. I.

THE JARVIS HAND-JIG T. A. I. M. E, vol. 39, p. 461. 8 pages. I.

CONSTRUCTION AND OPERATION OF HAND JIGS E. & M J, vol. 89, p. 1265 2½ columns. I.

HAND JIGS USED IN SOUTH AFRICAN TIN FIELDS E & M J, vol. 89, p. 471. ½ column. I.

CONSTRUCTION OF HAND JIGS. Min. & Sci. Press, vol. 95, p 557. 1 column. I.

JIGGING BY HAND By A. C. Nahl. Min. & Sci. Press, vol. 95, p. 557. 2½ columns. I.

THE HAND JIG IN PRACTICE By C. N. Nelson. E. & M. J, vol 87, p. 910. 2 columns. I.

HAND JIGS FOR SMALL MINES By J M. Calderwood. M. & M, vol. 31, p. 591. 1½ columns. I.

RICHARDS PULSATOR JIGS AND CLASSIFIERS E. & M. J., vol. 86, p. 621. 7½ columns. I.

See also CLASSIFIERS AND CLASSIFICATION.

THE RICHARDS PULSATOR JIG. By R. L. Herrick. M. & M., vol. 29, p. 122. 4 columns. I.

THE PULSATING PLUNGER JIG. T. I. M. & M., vol. 18, p. 2. 23 pages. I..

THE SEPARATION OF METALLIC ORES BY JIGGING. By A. Taylor. T. I. M. & M., vol. 18, p. 2. 23 pages. I.

INVESTIGATION ON JIGGING. By R. P. Jarvis. T. A. I. M. E., vol. 39, p. 451. 70 pages. D.

WOODEN JIG GRATES IN THE JOPLIN DISTRICT. By O. Ruhl and F. Sansom. E. & M. J., vol. 88, p. 1025. 3½ columns I.

A NEW JIG GRATE E. & M. J., vol. 89, p. 451. 3 columns. I.

DEVICE TO REDUCE TOP WATER ON JIGS. By J. L. Bruce. E. & M. J., vol. 90, p. 399. 1 column. I.

Hand Dressing, Sorting

HAND-PICKING ORES IN SARDINIA. T. A. I. M. E., vol. 39, p. 79. ½ page

SORTING ORE BY HAND. By L. D. Huntoon. E. & M. J., vol. 88, p. 964. 3½ columns.

HAND SORTING OF ORE. E. & M. J., vol. 89, p. 5. ¼ column.

SORTING TURQUOISE IN NEW MEXICO. E. & M. J., vol. 86, p. 845. 1½ columns.

ORE SORTING IN MEXICO. E. & M. J., vol. 85, p. 704. 1 column.

SURFACE AND UNDERGROUND SORTING. P. C. M. & M. Soc. S. A., vol. 7, p. 367. 1 column

ORE SORTING AT THE CABRESTANTE MINES, SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 464. 6½ columns I.

SORTING ORE AT THE NEW KLEINFONTEIN MILL, TRANSVAAL, SOUTH AFRICA. By E. J. Way. E. & M. J., vol. 85, p. 957. 1½ columns.

SOME FACTS AND FIGURES OF SORTING ON THE RAND. By L. D. Huntoon. E. & M. J., vol. 88, p. 1069. 6½ columns.

ORE SORTING IN THE PACHUCA AND REAL DEL MONTE. E. & M. J., vol. 86, p. 525. 1½ columns.

ORE SORTING ON THE RAND. T. A. I. M. E., col. 5, p. 63. 6 pages.

SORTING TABLE AT COBALT. By G. C. BATEMAN. E. & M. J., vol. 89, p. 1310. 1½ columns. I.

MAGNET FOR REMOVING STEEL FROM ORE. E. & M. J., vol. 88, p. 1238, 1 column I.

See also COST OF SORTING

Flotation Processes

THE HISTORY OF THE FLOTATION PROCESS. Min. Mag., London, Vol. 1, p. 61. 8 columns. I.

FLOTATION PATENTS. Min. Mag., London, vol. 1, p. 289. 2½ columns.

THE PHYSICS OF ORE FLOTATION. P. C. M. & M. Soc. S. A., vol. 6, p. 253. 1 column

See also THEORY OF CONCENTRATION.

A FEW NOTES ON THE ELMORE VACUUM PROCESS OF ORE CONCENTRATION. By H. H. Claudet. J. C. M. I., vol. 11, p. 460. 2 pages

THE ELMORE FLOTATION PROCESS. E. & M. J., vol. 86, p. 840. 4 columns

ELMORE PROCESS AS APPLIED BY ZINC CORPORATION. E. & M. J., vol. 88, p. 205. 7 columns I.

ELMORE VACUUM PLANT. Min. & Sci. Press, vol. 98, p. 391. 2½ columns I. Flow-sheet.

NOTES ON VARIOUS APPLICATIONS OF THE ELMORE VACUUM PROCESS. By A. S. Elmore. E. & M. J., vol. 87, p. 1275. 5½ columns.

OIL FLOTATION PROCESS AT BROKEN HILL, NEW SOUTH WALES. By T. J. Hoover. E. & M. J., vol. 89, p. 913. 11 columns. I.

METHOD OF DRYING OIL CONCENTRATES. By R. Støren. E. & M. J., vol. 85, p. 1151. ½ column. I.

VACUUM-CONCENTRATION AT SULITELMA, NORWAY. By H. Holmsen and H. N. Rees. Min. Mag., London, vol. 2, p. 377. 6 columns I.

MACQUISTEN PROCESS OF FLOTATION. P. C. M. & M. Soc. S. A., vol. 9, p. 411. ¼ column.

THE IMPROVED MACQUISTEN TUBE Flotation Process By W. R. Ingalls. E. & M J, vol 86, p 23. $\frac{1}{2}$ column. I.

THE MACQUISTEN CONCENTRATING PROCESS. E. & M J, vol 89, p 659. 1 column. I

THE DEVELOPMENT OF THE DELPRAT AND POTTER FLOTATION PROCESS. By W. R. Ingalls E. & M. J., vol 86, p 175. 2 columns.

ORE DRESSING BY ADHESION OF LIQUID FILMS. By R. Storen E. & M J, vol. 86, p. 839. $9\frac{1}{2}$ columns.

HORWOOD PROCESS FOR SEPARATING ZINC SULPHIDES. Flotation. By D Clark E & M J., vol. 89, p 460. $4\frac{1}{2}$ columns. I.

THE SANDERS FLOTATION PROCESS. E. & M J., vol. 87, p. 844. $\frac{1}{2}$ column. I.

THE MUREX MAGNETIC PROCESS. An Adjunct to the Flotation Process. Min. Mag, London, vol 1, p. 142. 4 columns

See also MAGNETIC CONCENTRATION and COST OF MILLING.

Amalgamation of Gold and Silver

AMALGAMATION OF SILVER AND GOLD. Min. Mag, vol 10, p. 288. $5\frac{1}{2}$ pages.

AMALGAMATION METHODS. By H. W. MacFairen Min. & Sci. Press, vol. 97, p. 814. $5\frac{1}{2}$ columns.

IMPROVEMENTS IN AMALGAMATION. Min. & Sci. Press, vol. 22, p. 344. $1\frac{1}{2}$ columns.

THE ECONOMICS OF AMALGAMATION. By J. H. Haynes M. & M., vol. 29, p. 321. $2\frac{1}{2}$ columns.

THE EFFECT ON AMALGAMATION, OF DIFFERENT INTERVALS OF TIME BETWEEN THE DRESSINGS OF PLATES. By G. O. Smart. P. C. M. & M. Soc. S A., vol. 9, p. 425. 10 columns.

ELECTRO-CHEMICAL AMALGAMATION. By D. F. McGrow Min. & Sci. Press, vol. 98, p. 897. $1\frac{1}{2}$ columns.

ELECTRO-CHEMICAL AMALGAMATION. P. C M & M. Soc S. A., vol. 10, p 26. 3 columns.

METHODS OF ELECTROCHEMICAL AMALGAMATION. By E. E. Carey. Min & Sci. Press, vol. 100, p. 394. 2 columns.

USES AND LIMITATIONS OF ELECTROLYTIC AMALGAMATION. By J. H. Jory. Min & Sci. Press, vol. 99, p 476 $1\frac{1}{2}$ columns. I.

AMALGAMATION FOLLOWING FINE GRINDING By C. F. Spaulding. Min & Sci. Press, vol. 101, p 872. $4\frac{1}{2}$ columns. I.

PEBBLE-MILL AMALGAMATION By W. H. Hardinger. Min & Sci. Press, vol. 100, p. 608. $1\frac{1}{2}$ columns I.

See also FINE CRUSHING BY MILLS.

THE WASHOE PROCESS. By A D Hodges, Jr Min. & Sci. Press, vol. 100, p 757. 3 columns.

CLEANING MERCURY. Min & Sci. Press, vol. 96, p 695. $\frac{1}{2}$ column.

NOTES ON MILL CONSTRUCTION, MILLING AND AMALGAMATION By I. Roskelley. P. C. M & M. Soc. S A., vol 5, p. 9, 9 columns, I.; p. 49, 9 columns.

See also MINE BUILDINGS, ETC., and COST OF MILLING.

Flow-Sheets

FLOW-SHEET OF REPORTS. E. & M J, vol 89, p. 1217 $\frac{1}{2}$ column. D.

FLOW-SHEET OF ASBESTOS TREATMENT IN QUEBEC J. C. M I., vol. 13, p. 413. I

See also OCCURRENCE OF ASBESTOS.

FLOW-SHEET OF THE BRAVER BROOK BREAKER M. & M., vol 30, p. 707. D.

See also PREPARATION OF COAL

REVISED FLOW-SHEET OF UTAH COPPER MILL By C T. Rice E & M J., vol 90, p. 1264. 3 columns. I.

FLOW-SHEET OF THE OHIO CONCENTRATOR. Min. & Sci. Press, vol. 101, p. 303. Diagram.

FLOW-SHEET OF THE MIAMI MILL, ARIZONA. M. & M., vol 31, p. 2. I.

FLOW-SHEET OF THE MT. MORGAN, MINE. M. & M., vol 29, p. 4. I.

FLOW-SHEET OF ELECTROSTATIC SEPARATION. M. & M., vol. 30, p. 364 D.

See also ELECTRO-STATIC SEPARATION

FLOW-SHEETS OF THE LORETO AND QUERÉTARO MILLS, MEXICO. Min. Mag, London, vol 2, pp. 130 and 131. D.

FLOW-SHEET OF THE JESUS MARIA MILL, GUANAJUATO. E. & M J, vol. 86, p. 616. I.

FLOW-SHEETS FOR COBALT MILLS. E. & M J, vol. 90, pp. 1254, 1255, 1256, and 1257. D.

FLOW-SHEET AT THE AJUCHITLAN MILL, QUERÉTARO, MEXICO Min. & Sci. Press, vol. 100, p. 214. 1 column I.

FLOW-SHEET OF THE FLORENCE-GOLD-FIELD MILL. E. & M. J., vol. 89, p. 366. I.

FLOW-SHEETS OF ORE TREATMENT AT KALGURLI, AUSTRALIA. Min. & Sci. Press, vol. 101, p. 402 D.

FLOW-SHEET OF THE MONTGOMERY-SHOSHONE MILL. E. & M. J., vol 89, p. 218. I.

FLOW-SHEET OF THE CONQUEROR TAILINGS PLANT. E. & M. J, vol 89, p. 668. I.

FLOW-SHEET OF THE MIDVALE PLANT M. & M., vol. 30, p. 518. D.

FLOW-SHEETS OF HERCULES AND FEDERAL'S MAMMOTH MILL. E. & M. J, vol. 88, pp. 1105, 1106. D.

FLOW-SHEET IN THE CŒUR D'ALENE DISTRICT: Typical. E. & M. J., vol. 89, p. 824. I.

FLOW-SHEET OF DOE RUN MILL, MISSOURI. E. & M. J, vol. 89, p. 611 I.

FLOW-SHEET OF GRAPHITE TREATMENT. M. & M., vol. 30, p. 394 3 columns. D.

See also OCCURRENCE OF GRAPHITE.

FLOW-SHEETS OF AMERICAN AND MEXICAN MILLS. E. & M. J, vol 88, p 864, 12 columns, I.; p. 966, 8 columns D.

Use of Plates in Amalgamation

NOTES ON THE SCALING AND SWEATING OF COPPER BATTERY PLATES By S. F. Goddard. T. I. M. & M., vol. 18, p. 495. 4 pages.

THE SILVER COATING OF AMALGAMATING PLATES P. C. M & M Soc. S A., vol 9, p. 142 2 columns. I.

THE SILVER COATING OF AMALGAMATING PLATES P. C. M. & M Soc. S. A., vol. 9, p. 222 $\frac{1}{2}$ column

SILVER COATING OF AMALGAMATING PLATES. By W. A. Caldecott Min. & Sci. Press, vol. 98, p. 92. 1 $\frac{1}{2}$ columns.

COPPER PLATE ABSORPTION. P. C. M & M., Soc. S. A., vol. 9, p. 214. 1 $\frac{1}{2}$ columns.

THE USE OF ELECTRO-PLATED COPPER PLATES IN THE BATTERY. By F. W. Cindel. P. C. M. & M. Soc. S. A., vol. 5, p. 92, 6 columns; p. 175, 3 columns; p. 205, 1 $\frac{1}{2}$ columns; p. 316, $\frac{1}{2}$ column.

DRESSING PLATES AS AFFECTING AMALGAMATION E. & M. J., vol. 88, p. 556. 2 $\frac{1}{2}$ columns.

MONEL METAL. E. & M. J., vol. 86, p. 1256. $\frac{1}{2}$ column.

SCALING AND SWEATING OF COPPER BATTERY PLATES. By S. F. Goddard. Min. & Sci. Press, vol. 99, p. 368. 1 column.

THE AVERAGE RATE OF ACCUMULATION AND ABSORPTION OF GOLD AMALGAM BY COPPER PLATES By E. Halse T. I. M. & M, vol. 17, p. 486. 12 pages.

ABSORPTION OF GOLD AMALGAM BY COPPER PLATES. E. & M. J., vol. 86, p. 996. 1 $\frac{1}{2}$ columns.

THE ABSORPTION AND ACCUMULATION OF GOLD ON COPPER PLATES. By W. F. A. Thomas. T. I. M. & M, vol. 17, p. 482. 3 $\frac{1}{2}$ pages.

Pan Amalgamation

A NEW AMALGAMATING PAN Min. & Sci. Press, vol. 20, p. 209 3 columns. I.

PAN-AMALGAMATION EXPERIMENTS By H. O. Hofman and C. R. Hayward. Min. & Sci. Press, vol. 99, p. 529. $9\frac{1}{2}$ columns. I.

PAN-AMALGAMATION. An Instructive Laboratory Experiment By H. O. Hofman and C. R. Hayward. T. A. I. M. E., vol. 40, p. 382. 16 pages. I., Discussion, p. 864. 10 pages I.

Amalgamating Apparatus (Amalgamators)

THE PIERCE AMALGAMATOR. E & M J., vol. 85, p. 112. 1 column. I.

THE PIERCE AMALGAMATOR By J. H. Haynes. M & M., vol. 29, p. 524 3 columns. I.

AMALGAMATOR AT THE RUBY MILL, WARD, COLORADO Min. & Sci. Press, vol. 101, p. 875. 2 columns I.

A TAIL-BOX FOR AMALGAMATION. Amalgam Trap By H. S. Reed, Jr. E & M. J., vol. 89, p. 599. 2 columns I.

The Patio Process of Amalgamation

THE PATIO PROCESS. By C. P. Duarte. P. C. M & M. Soc. S. A., vol. 9, p. 105. $9\frac{1}{2}$ columns

THE PATIO PROCESS. By F. MacCoy. E. & M. J., vol. 90, p. 958. $2\frac{1}{2}$ columns. I.

THE PATIO PROCESS AT THE GUADALUPE HACIENDA, PACHUCA, MEXICO. E. & M. J., vol. 86, p. 559. 5 columns. I.

THE PATIO PROCESS AT GUANAJUATO, MEXICO. E. & M. J., vol. 89, p. 961. 1 column.

See also COST OF MILLING.

Electrostatic Separation

ELECTROSTATIC SEPARATION By H. A. Wentworth Min. & Sci. Press, vol. 101, p. 567. $2\frac{1}{2}$ columns

THE BLAKE-MORSCHER ELECTROSTATIC SEPARATOR. M & M., vol. 30, p. 363. 2 columns. I.

ELECTROSTATIC SEPARATION OF MINERALS IN ORES. By H. A. Wentworth E & M. J., vol. 90, p. 15. $8\frac{3}{8}$ columns I

ELECTROSTATIC ZINC SEPARATION By L. A. Palmer M & M., vol. 30, p. 362. 9 columns I.

ELECTROLYTIC SEPARATION OF NICKEL AND COPPER. P. C. M & M. Soc. S. A., vol. 9, p. 53. $\frac{1}{2}$ column.

See also COST OF MILLING.

Magnetic Separation

ELECTRO MAGNETIC SEPARATION By J. N. Judson. E & M J., vol. 88, p. 270. $3\frac{1}{4}$ columns.

ELECTRICITY AS A FACTOR IN ORE DRESSING. Magnetic Concentration. By W. B. Roberts. T. A. I. M. E., vol. 1, p. 131 4 pages I.

AN ELECTROMAGNET FOR TESTING THE SUITABILITY OF AN ORE FOR MAGNETIC SEPARATION. By L. H. L. Huddart E. & M. J., vol. 85, p. 1008. $1\frac{1}{2}$ columns. I.

AN ELECTRO-MAGNET FOR TESTING THE SUITABILITY OF AN ORE FOR MAGNETIC SEPARATION. By L. H. L. Huddart. T. I. M. & M., vol. 17, p. 435 5 pages. I.

THE MAGNETIC PROPERTIES OF IRON AND STEEL AT LIQUID AIR TEMPERATURES By C. C. Trowbridge. Sch. Mines Quart., vol. 24, p. 72. 12 columns. I.

THE MUREX MAGNETIC PROCESS: Magnetism Applied to Flotation. Min. Mag., London, vol. 1, p. 142. 4 columns.

THE MUREX MAGNETIC CONCENTRATION PROCESS E & M. J., vol. 88, p. 371. $1\frac{1}{2}$ columns.

MUREX MAGNETIC CONCENTRATION PROCESS. Min. & Sci. Press, vol 98, p. 757. 1 column

See also FLOTATION PROCESSES.

THE FERRARIS MAGNETIC SEPARATOR: A New Form. Min Mag, London, vol 2, p. 227. $\frac{1}{2}$ column. I.

THE GRONDAL PROCESS OF CONCENTRATING IRON ORES By P. McN. Bennie. J. C. M. I., vol. 11, p. 189 14 pages I. Maps

MAGNETIC CONCENTRATION OF IRON ORES BY THE GRONDAL PROCESS. By P McN. Bennie. J C M. I., vol. 10, p 261. 12 $\frac{1}{2}$ pages. D.

MAGNETIC SEPARATION OF ZINC ORES IN THE SANTA BARBARA DISTRICT, MEXICO. E. & M J, vol. 86, p. 211. 1 $\frac{1}{2}$ columns.

MAGNETIC SEPARATION OF WOLFRAMITE M. & M., vol 31, p. 462. 1 column. I

MAGNET USED IN THE SEPARATION OF TIN-OXIDE FROM WOLFRAM T. I M. & M., vol. 17, p 157. Note I.

THE SEPARATION OF TIN-OXIDE FROM WOLFRAM By A Treloar. T. I M. & M., vol. 17, p. 137. 22 pages. I.

MAGNETIC SEPARATION OF MONAZITE IN THE CAROLINAS T A. I M E, vol. 40, p. 332. 6 pages. I

MAGNETIC SEPARATION IN SARDINIA. T. A. I. M. E., vol. 39, p. 91. 3 pages.

MAGNETIC SEPARATION AT MONTEPONT. Min. Mag., London, vol. 2, p. 227. $\frac{1}{2}$ column. I.

See also COST OF MILLING.

Concentrators, Tables, Buddles, Etc.

THEORY OF THE ACTION OF THE WILFLEY TABLE. By R. H. Richards. T. A. I. M. E., vol. 38, p. 556. 23 pages. I.

THE WILFLEY TABLE, I. By R. H. Richards. T. A. I. M. E., vol. 38, p. 556. 23 pages. I.

THE WILFLEY TABLE, II By R. H. Richards T A I M. E., vol 39, p. 303. 11 pages I

USE OF WILFLEY TABLES IN THE CŒUR D'ALENE DISTRICT E & M. J, vol. 89, p 822. 3 columns.

CONCENTRATION OF FINE SANDS ON A BELT VANNER. By T M. Owen and J. F. Stephen. T Au. I M. E., vol. 13, p. 143. 10 $\frac{1}{2}$ pages.

See also SAND TREATMENT.

TREATMENT OF SLIMES ON VANNERS. By R Gahl T A I M E, vol 40, p. 517. 21 $\frac{1}{2}$ pages I

See also SLIMES AND THEIR TREATMENT.

A SUSPENDED FRAME FRUE VANNER. By G B. Shipley. E & M. J., vol 85, p. 415. 1 column I.

VANNERS IN THE BUNKER HILL MILL Min. Mag., London, vol. 3, p 54. 1 $\frac{1}{2}$ columns I.

VANNERS IN THE CŒUR D'ALENE DISTRICT. E & M J, vol. 89, p. 823. 1 column.

LA POINT FLOUR-GOLD SEPARATOR. E & M. J., vol 85, p. 1141 $\frac{1}{2}$ column. I.

GOLD SAVING TABLES ON CALIFORNIA DREDGES. E & M. J., vol 89, p 1311. 2 columns. I.

See also DREDGING FOR GOLD AND OTHER MATERIALS.

THE HENNING CONCENTRATING TABLE. E. & M. J., vol. 86, p. 134. 1 column. I.

THE TAYLOR CONCENTRATING TABLE. Min. & Sci. Press, vol. 95, p. 692. 1 $\frac{1}{2}$ columns. I.

THE GOLDEN CYCLE CONCENTRATOR. M. & M., vol. 30, p. 673. 2 columns.

REITINGER'S PERCUSSION TABLE. Min. & Sci. Press, vol. 20, p. 130. 1 column. I.

OSCILLATING-TABLES FOR ORE TREATMENT IN SARDINIA. T. A. I. M. E., vol. 39, p. 83. 6 pages. I.

RECIPROCATING TABLES IN THE BUNKER HILL MILL Min. Mag., London, vol. 3, p. 50. 6 columns.

THE GREASE TABLE FOR COLLECTING DIAMONDS E & M. J., vol. 89, p. 371. $\frac{1}{2}$ column.

CONSTRUCTION OF CANVAS TABLES FOR CANVAS SLIME PLANT E. & M. J., vol. 89, p. 356. 2 columns. I.

AN IMPROVED BLANKET TABLE. By T. White. T. Au. I. M. E., vol. 4, p. 36. 6 pages. I.

BUDDLES FOR COARSE AND FINE ORE IN THE TIN WORKS OF YUNNAN DISTRICT, CHINA T. I. M. & M., vol. 19, p. 191. 1 page. I.

THE BUDDLE AS A CONCENTRATOR OF COPPER SLIMES. By C. T. Rice. E. & M. J., vol. 90, p. 1107. 5 columns. I.

THE MEXICAN PLANILLAS E. & M. J., vol. 90, p. 353. 1 column. I.

MEXICAN "PLANILLA" CONCENTRATOR By H. J. Baron. M. & M., vol. 30, p. 377. 3 columns. I.

ORE CONCENTRATOR. Min. & Sci. Press, vol. 22, p. 161. 1 column. I.

CENTRIFUGAL DRY CONCENTRATOR. Min. & Sci. Press, vol. 97, p. 608. 1 column.

Washing Coal and Mineral

PROCESS OF COAL WASHING. By S. Diescher. P. E. Soc. W. Pa., vol. 23, p. 199. 22 pages. I.

DESCRIPTION OF WASHING (COAL) PLANTS IN OPERATION. By W. G. Wilkins. P. E. Soc. W. Pa., vol. 23, p. 221. 20 pages. I.

THE BITUMINOUS WASHERY AT TYLER, PENNSYLVANIA. By E. K. Judd. E. & M. J., vol. 85, p. 457. 8 columns. I.

THE OPERATION OF A COAL WASHERY IN COLORADO. By W. F. Murray. E. & M. J., vol. 86, p. 1248. 9 columns. I.

A MODERN COAL WASHERY IN NEW MEXICO. E. & M. J., vol. 86, p. 182. $6\frac{1}{2}$ columns.

WASHING AND COKING TESTS OF COAL AT DENVER, COLORADO. By A. W. Belden and others. U. S. G. S., Bull. 368. 54 pages. I. 1909.

See also TESTING FUELS AND THEIR VALUE

DAWSON COAL WASHING PLANT, NEW MEXICO M. & M., vol. 29, p. 91. 2 columns. I.

A NEW COAL WASHERY IN MICHIGAN. By Lee Fraser. E. & M. J., vol. 87, p. 993. $3\frac{1}{2}$ columns. I.

COAL WASHING IN THE GREAT FALLS COALFIELD, MONTANA. E. & M. J., vol. 87, p. 590. 1 column.

THE COAL-WASHING PLANT AT THE DAWSON MINE, NEW MEXICO M. & M., vol. 31, p. 656. $2\frac{1}{2}$ columns. I.

ELECTRIC COAL WASHING IN SOUTH WALES. P. C. M. & M. Soc. S. A., vol. 9, p. 281. 1 column.

ERNEST COAL-WASHING PLANT M. & M., vol. 29, p. 251. 3 columns. I.

SCAIFE AUTOMATIC TROUGH WASHER FOR COAL AND ORE M. & M., vol. 29, p. 328. $\frac{1}{2}$ column. I.

See also PREPARATION OF COAL.

THE LOG WASHER IN ZINC MINING. By L. L. Wittich. M. & M., vol. 31, p. 423. 1 column. I.

LOG WASHERS USED IN MINNESOTA FOR WASHING IRON ORE. M. & M., vol. 29, p. 97. $3\frac{1}{2}$ columns. I.

LOG WASHER FOR GOLD ORES. E. & M. J., vol. 87, p. 936. 2 columns. I.

ORE WASHING AT CRIPPLE CREEK. By S. A. Worcester. Min. & Sci. Press, vol. 98, p. 291. $3\frac{1}{2}$ columns.

NEW TYPE OF WASHER FOR LOW-GRADE GOLD ORES. By J. H. Pratt. E. & M. J., vol. 87, p. 935. 10 columns. I.

NEW PLANT FOR WASHING IRON ORE, MESABI RANGE By E. K. Soper. E. & M. J., vol. 90, p. 712. $5\frac{1}{2}$ columns. I.

WASHING FLOORS FOR TIN CONCENTRATION, YUNNAN, CHINA. T. I. M. & M., vol. 19, p. 191. 1 page. I.

SOMETHING NEW IN ORE WASHING:
A Washer. Min & Sci. Press, vol. 22, p. 392. $\frac{1}{2}$ column.

BARITE WASHING T. A. I. M. E., vol. 40, p. 739. 2 pages. I.

THE ROTARY PAN METHOD OF WASHING TIN ORE. P. C. M. & M., Soc. S. A., vol. 8, p. 175. 2 columns.

DIAMOND-WASHING Min. Mag., London, vol. 3, p. 439. 2 columns. I.

See also **COST OF WASHING COAL AND ORES.**

Disposal of Waste

THE DISPOSAL OF RESIDUES AT KALGOORLIE By H. Adams T. A. I. M. E., vol. 13, p. 115. 13 $\frac{1}{2}$ pages. I.

THE JACKSON METHOD OF TAILINGS DISPOSAL. E. & M. J., vol. 85, p. 643. 3 columns. I.

DISPOSAL OF SLIMES AND TAILINGS AT STELLA MINE, NEW YORK. E. & M. J., vol. 88, p. 556. 1 $\frac{1}{2}$ columns. I.

TAILING DISPOSAL PLANT AT THE WOLVERINE MILL By C. K. Baldwin. E. & M. J., vol. 88, p. 71. 8 columns. I.

TAILING DISPOSAL AT MERCUR, UTAH. By H. W. MacFarren. Min & Sci. Press, vol. 97, p. 125. 1 $\frac{1}{2}$ columns. I.

CONVEYING TAILING THROUGH PIPE. Min. & Sci. Press, vol. 95, p. 78. 1 $\frac{1}{2}$ columns.

See also **PIPES, ETC.**

CONVEYING TAILING IN LAUNDERS. By C. W. Van Law. Min. & Sci. Press, vol. 95, p. 457. 1 column.

See also **LAUNDERS AND DISTRIBUTORS.**

CONVEYOR SYSTEM FOR DISPOSING OF WASTE. By E. Higgins. E. & M. J., vol. 87, p. 210. 3 columns. I.

See also **CONVEYORS FOR MINERAL AND COAL.**

DUMPING RESIDUE AT KALGOORLIE. By M. W. Von Bernewitz. Min. & Sci. Press, vol. 95, p. 368. 4 $\frac{1}{2}$ columns, I.; p. 459, 2 columns, I.

HANDLING TAILINGS AT COLORADO CITY. By R. L. Herrick. M. & M., vol. 30, p. 621. 5 $\frac{1}{2}$ columns. I.

METHOD OF HANDLING SLIMES AND TAILINGS. By A. O. Ihseng E. & M. J., vol. 89, p. 762. 2 $\frac{1}{2}$ columns. I.

IMPOUNDING MILL TAILING. By H. W. MacFarren. Min & Sci. Press, vol. 99, p. 333. 2 columns. I.

THE CALUMET AND HECLA SAND WHEELS By C. L. Fichtel. E. & M. J., vol. 90, p. 218. 3 $\frac{1}{2}$ columns. I.

See also **ELEVATORS**

See also **DESCRIPTION OF DAMS AND THEIR CONSTRUCTION**

See also **PACKING MINE WORKINGS, ETC.**

Hand Tests on Mineral

THE USE OF STANDARDS IN READING GOLD PANNINGS. By S. J. Lett. T. I. M. & M., vol. 18, p. 482. 13 pages, vol. 19, p. 597. 5 pages

See also first volume of **INDEX**, page 82.

Classifiers and Classification

CLASSIFICATION IN THE COEUR D'ALENE DISTRICT E. & M. J., vol. 89, p. 514. 6 columns. I.

CLASSIFICATION AT EL ORO MILL. By G. W. Brown. M. & M., vol. 29, p. 249. 2 columns

CLASSIFICATION OF SLIMES. T. I. M. & M., vol. 19, p. 409. 3 pages.

See also **SLIME TREATMENT.**

CLASSIFICATION BY CURRENT OF WATER: Treatment of Ores in Sardinia. T. A. I. M. E., vol. 39, p. 77. 2 $\frac{1}{2}$ pages. I.

DEVELOPMENT OF HINDERED SETTLING APPARATUS. By R. H. Richards. J. C. M. I., vol. 13, p. 495. 65 pages. I.

See also **THEORY OF CONCENTRATION.**

SPITZLUTTEN. By H. Leupold. P. C. M. & M. Soc. S. A., vol. 5, p. 239. 3 $\frac{1}{2}$ columns. I.

CLASSIFIERS IN ORE DRESSING. Min. & Sci. Press, vol. 20, p. 66. 1 column. I.

- THE WILSON HYDRAULIC SEPARATOR.** P. C. M. & M. Soc. S. A., vol. 8, p. 176 2 columns. I.
- THE MERRILL CLASSIFIER.** E. & M J., vol. 87, p. 808. $\frac{1}{2}$ column. I.
- THE BLANC TURBO-CLASSIFIER** E & M J., vol. 87, p. 500. $2\frac{1}{2}$ columns. I.
- THE CHAPMAN CLASSIFIER** E. & M. J., vol. 89, p. 917. I.
- PIPE CLASSIFIER.** Used at the Bunker Hill and Sullivan Mill Min & Sci. Press, vol. 100, p. 121 2 columns I
- THE DORR CLASSIFIERS** Used at the Pachuca Mills E & M. J., vol. 86, p. 650. $1\frac{1}{2}$ columns.
- THE SOUCHON CLASSIFIER** E. & M. J., vol. 85, p. 1009. $1\frac{1}{2}$ columns. I.
- DIAPHRAGM CONES AND TUBE-MILLING.** By W. Neal Min. & Sci. Press, vol. 100, p. 483. 7 columns. I.
- See also FINE CRUSHING BY MILLS.
- SAND SEPARATORS: Unwatering Apparatus at Wolverine Mill.** E. & M. J., vol. 88, p. 72. 1 column. I.
- See also SAND TREATMENT
- See also FINE CRUSHING BY MILLS.
- Slimes and Their Treatment**
- THE ELEMENTS OF SLIME CONCENTRATION.** By W. McDermott. T. I. M. & M., vol. 19, p. 400. 31 pages I.
- SLIME TREATMENT** By A. M. Nichols. Min. & Sci. Press, vol. 95, p. 583. 1 column I
- SLIME TREATMENT** Min. & Sci. Press, vol. 95, p. 715. 3 columns. I
- TREATMENT OF ORE SLIME.** By A. F. Crosse. P. C. M. & M Soc. S. A., vol. 10, p. 172. 4 columns. I.
- TREATMENT OF SLIME.** P. C. M. & M. Soc. S. A., vol. 10, p. 408. 5 columns D.
- TREATMENT OF SLIMES.** By W. B. Gray. T. Au. I. M. E., vol. 5, p. 138. $4\frac{1}{2}$ pages.
- TREATMENT OF SLIME.** By H. C. Nichols. Min. Mag., London, vol. 1, p. 221. $6\frac{1}{2}$ columns. I.
- CONCENTRATION OF SLIME.** By W. E. Darrow. Min & Sci Press, vol. 95, p. 268. 2 columns.
- SLIME CONCENTRATION** By F. R. Porter. Min. & Sci. Press, vol. 100, p. 431 $2\frac{1}{2}$ columns.
- CONCENTRATION OF SLIME.** By M. W. Von Bernewitz. Min. & Sci Press, vol. 101, p. 777. $2\frac{1}{2}$ columns. I
- CONCENTRATION OF SLIME** By E. A. Sperry Min. & Sci. Press, vol. 101, p. 174, 5 columns, p. 206, $10\frac{1}{2}$ columns, I; p. 432, 6 columns, I
- THE ELEMENTS OF SLIME CONCENTRATION** E & M J., vol. 89, p. 1105. 4 columns
- See also THEORY OF CONCENTRATION.
- SLIME SETTLEMENT.** E. & M J., vol. 86, p. 854. $1\frac{1}{2}$ columns.
- CLASSIFICATION OF SLIMES** Min. & Sci. Press, vol. 101, p. 206. $3\frac{1}{2}$ columns
- DEWATERING SLIMES.** Min & Sci. Press, vol. 101, p. 208. $5\frac{1}{2}$ columns I.
- SLIME SETTLER OR DEWATERER** By R E Huntley M & M., vol. 31, p. 339. $1\frac{1}{2}$ columns
- See also CLASSIFIERS AND CLASSIFICATION
- VANNERS FOR TREATING SLIMES.** T. A. I. M. E., vol. 40, p. 517. $21\frac{1}{2}$ pages I.
- SLIME TREATMENT BY BELT-TABLES IN SARDINIA.** T. A. I. M. E., vol. 39, p. 86. $1\frac{1}{2}$ pages I.
- See also CONCENTRATORS, TABLES, ETC.
- A METHOD OF SETTLING SLIMES, AS APPLIED TO THEIR SEPARATION FROM SOLUTION IN CYANIDE TREATMENT.** By H. G. Nichols. T. I. M. & M., vol. 17, p. 293. 38 pages. I.
- See also CYANIDING OF ORES.
- STATIONARY AND MOVING SURFACES FOR SLIME CONCENTRATION.** T. I. M. & M., vol. 19, p. 401. 4 pages.
- THE JAMES SLIMER.** By M. T. Hoster. E. & M. J., vol. 86, p. 1149. $1\frac{1}{2}$ columns. I.

TABLES OR SAND JIGS. E & M. J., vol. 85, p. 1041. 1 column.

See also CONCENTRATORS, TABLES, ETC., JIGS AND JIGGING, and SAND TREATMENT.

GOLD SLIMES TREATMENT. Filtering. E & M. J., vol. 87, p. 902 2 columns I

See also CYANIDING OF ORES.

SLIME TREATMENT AT BROKEN HILL, NEW SOUTH WALES E. & M. J., vol. 87, p. 939. $\frac{1}{2}$ column

SLIME TREATMENT AT KALGOORLIE. By M. W. Von Bernewitz. Min. & Sci. Press, vol. 95, p. 743. 2 columns. I.

SLIME TREATMENT AT THE MONTGOMERY-SHOSHONE MILL. E & M J., vol. 89, p. 219. $1\frac{1}{2}$ columns

SLIME TREATMENT AT THE PITTSBURG SILVER PEAK MILL, NEVADA M. & M., vol. 29, p. 571 1 column.

SLIME TREATMENT AT THE DESERT MILL, MILLERS, NEVADA. Min. & Sci. Press, vol. 95, p. 496. 3 columns. I.

SLIME TREATMENT AT TONOPAH, NEVADA. E & M. J., vol. 87, p. 596. 1 column.

SLIME TREATMENT AT MINAS DEL TAJO, SINALOA E & M J., vol. 89, p. 568. $1\frac{1}{2}$ columns.

SLIME TREATMENT IN THE GUANAJUATO CYANIDE MILLS. E. & M. J., vol. 86, p. 998, 2 columns; p. 1001, $1\frac{1}{2}$ columns

SLIME CONCENTRATING AT THE PINGUICO MILL, MEXICO. E. & M. J., vol. 85, p. 705. $2\frac{1}{2}$ columns.

See also CYANIDING OF ORES.

SLIME TREATMENT AT DOE RUN, MISSOURI. E. & M. J., vol. 89, p. 611. 1 column.

RECLAIMING ZINC-LEAD FINES. By L. Wittich. M. & M., vol. 31, p. 131. 1 column. I.

SLIMES TREATMENT OF TIN ORE IN THE CAPE COLONY MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 177. $1\frac{1}{2}$ columns. I.

MEASUREMENT OF PULP AND TAILING. By W J Sharwood. Min. Mag., London, vol. 1, p 226, 8 columns, I; p. 297, 16 columns, D.

See also CONCENTRATORS, TABLES, BUDDLES, ETC

See also FINE CRUSHING BY MILLS

See also COST OF CYANIDING.

See also CYANIDING GOLD, ETC., and COST OF MILLING.

Sand Treatment

SAND TREATMENT. Min. & Sci. Press, vol. 98, p. 316. $1\frac{1}{2}$ columns

TREATMENT OF SANDS AT MINAS DEL TAJO, SINALOA E. & M. J., vol. 89, p. 567 2 columns.

SAND TREATMENT AT THE CONSOLIDATED MERCUR MINES E. & M. J., vol. 89, p. 1276. $1\frac{1}{2}$ columns.

TREATMENT OF SANDS AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 570. 2 columns.

See also CLASSIFIERS AND CLASSIFICATION AND SLIMES AND THEIR TREATMENT.

See also CYANIDING GOLD, ETC.

Dry Concentration

THE HUNGARIAN DRY WASHER FOR TREATING DRY PLACERS. Min. & Sci Press, vol. 97, p. 360. 1 column I.

DRY-PLACER MACHINES. By G M. Peterson. Min & Sci Press, vol. 101, p. 639. $1\frac{1}{2}$ columns

DRY-WASHING FOR PLACER-GOLD IN SONORA, MEXICO. By J. V. Richards T. A. I. M E, vol. 41, p 797. 6 pages. I.

DRY PLACER MINING MACHINES. By E B. Wilson. M & M, vol 31, p. 589 $4\frac{1}{2}$ columns. I.

See also AURIFEROUS GRAVELS, PROSPECTING, and HYDRAULIC MINING.

DRY-GOLD WASHERS. M. & M., vol. 31, p 229 3 columns. I.

THE BEHREND DRY CONCENTRATOR. E & M J., vol. 85, p. 1294. 2 columns I.

See also CONCENTRATORS, TABLES, ETC.

Salt Making

SALT: Its History, Occurrence and 'Manufacture. By A A Hayard. J M Soc N. S, vol. 11, p. 99. 18 pages

SALT: Historically, Statistically, and Economically; New Improved American Salt Manufacture By R Thomassy. Min. Mag, vol 9, p. 438 3½ pages

HISTORY OF SALT MAKING By E. W. Parker. U S G S, 18th Ann Rept., pt 5. 24 pages. 1896-97

SALT MAKING AT ALAMEDA, CALIFORNIA. Min. & Sci Press, vol. 22, p. 70 ½ column.

PURIFYING ROCK SALT BY FUSION E & M J, vol 86, p 564. ½ column

SALT-MAKING PROCESSES IN THE UNITED STATES By T M. Chatard. U. S G S., 7th Ann Rept, pp. 491-535 1885-86 I.

SALT PRODUCTION WITH EXHAUST STEAM By N B. Beasley E & M J., vol 87, p 1150 1½ columns.

NOTES ON THE EVAPORATED SALT INDUSTRY OF KANSAS By C M. Young E & M J, vol 88, p. 558. 10½ columns. I.

THE ROCK SALT MINING INDUSTRY IN KANSAS. By S Ainsworth. E & M J, vol. 88, p 454. 7½ columns. I.

See also **METHODS OF MINING, and MINING THICK and MASSIVE DEPOSITS, also COST OF MILLING**

Practice in Milling Ores

ORE DRESSING IN THE UNITED STATES AND MEXICO. By H. A. Guess. E. & M J., vol 88, p 864, 12 columns, D; p 966, 11 columns, I, D.

PROGRESS AND PROBLEMS IN ORE DRESSING. By C. De Kalb. Min & Sci Press, vol 100, p. 54. 7 columns. I.

DESIGNING A THOUSAND-TON CONCENTRATING PLANT. By C. C. Christensen. Min. & Sci. Press, vol. 101, p. 806. 4½ columns. I.

THE CONQUEROR TAILINGS PLANT. E. & M. J, vol. 89, p. 668. 2 columns I.

See also **DISPOSAL OF WASTE.**

THE MECHANICAL PREPARATION OF ORES IN SARDINIA. By E Ferraris. T. A I. M E., vol 39, p. 72. 25½ pages. I.

CONCENTRATING MIXED ORES AT ROSAS, SARDINIA By U. Coppa. E & M J, vol 85, p 943 10 columns I

THE SOUTH UTAH MILL. M & M, vol 31, p. 592. 8½ columns. I.

CONCENTRATION AT NAGYBANYA, HUNGARY Min & Sci Press, vol. 96, p. 66. 3 columns I

MODE OF TREATMENT OF ORES AT THE MINES OF SCHEMNITZ, IN HUNGARY. Min Mag, vol 3, p 260. 3 pages.

MILLING OF ASBESTOS IN QUEBEC J. C. M I, vol 13, p 411. 3½ pages. Flow-sheet

See also **OCCURRENCE OF ASBESTOS**

PREPARATION OF BARITE FOR MARKET, MISSOURI T. A. I. M. E., vol. 40, p 734 9½ pages I.

See also **OCCURRENCE OF BARITE and REDUCTION OF ORES**

THE OHIO CONCENTRATOR. By L. A. Palmer Min & Sci Press, vol 101, p. 301 7½ columns I.

MIAMI CONCENTRATING MILL, ARIZONA By R. L. Herrick. M & M, vol. 31, p. 1. 5 columns I.

THE OHIO CONCENTRATOR AT BINGHAM CANYON, UTAH. By L. A. Palmer. M & M., vol. 29, p. 519. 3½ columns. Flow-sheet.

CONCENTRATION AT CANANEA, MEXICO. By C. De Kalb. Min. & Sci. Press, vol 101, p 325. 12½ columns. I.

LAKE SUPERIOR ORE-DRESSING PRACTICE. By L. S. Austin. Min. & Sci Press, vol. 96, p. 259. 3½ columns I.

CONCENTRATION AT THE BUTTE REDUCTION WORKS. By A H. Wetthey. E. & M. J., vol. 88, p. 415 3½ columns. I.

- EXPERIMENTAL MILL OF THE NEVADA CONSOLIDATED COPPER COMPANY.** By M. L. Requa. Min. & Sci. Press, vol. 97, p. 90 9 columns. Tables.
- DRESSING OF ORES AT THE YELTA COPPER MINE, SOUTH AUSTRALIA.** T. Au. I. M. E., vol. 11, p. 99. 4 pages.
- PREPARATION OF DIAMONDS AT THE DE BEERS MINES** P. C. M. & M. Soc. S. A., vol. 7, p. 228 2½ columns.
- PROGRESS IN THE TREATMENT OF GOLD ORE.** By A. James. Min. & Sci. Press, vol. 96, p. 41. 3½ columns.
- TREATMENT OF THE BANKET DEPOSITS, SOUTH AFRICA.** T. Au. I. M. E., vol. 3, p. 84 5 pages. I.
- ANALYSIS OF MINE AND MILL PRACTICE ON THE RAND.** By E. M. Weston. E. & M. J., vol. 89, p. 169, 14 columns, I.; p. 267, 10½ columns, I.
- DESCRIPTION OF ORE TREATMENT AT THE GIANT MINE, HARTLEY DISTRICT, RHODESIA** By R. C. H. Cooke. P. C. M. & M. Soc. S. A., vol. 9, p. 152 8½ columns. I.
- THE TREATMENT OF THE GOLD ORES OF HOG MOUNTAIN, ALABAMA** By T. H. Aldrich. T. Au. I. M. E., vol. 39, p. 578. 6 pages
- PROGRESS IN ORE TREATMENT AT KALGOORLIE** By M. W. Von Bernwitz. Min. & Sci. Press, vol. 100, p. 926 5½ columns.
- NOTES ON THE WAIHI ORE TREATMENT.** By R. Stokes. P. C. M. & M. Soc. S. A., vol. 8, p. 10, 8 columns, I.; p. 53, 3 columns; p. 121, 1 column; p. 209, ¾ column.
- THE TREATMENT OF THE AURIFEROUS SULPHIDE ORES OF KALGOORLIE.** By F. Moss. T. Au. I. M. E., vol. 8, pt. 1, p. 40. 27 pages.
- MILLING AND TREATMENT OF AURIFEROUS ORES IN NEW ZEALAND.** By H. A. Gordon. T. Au. I. M. E., vol. 9, p. 206. 18 pages.
- THE TREATMENT OF CASSILIS ORE, EAST GIPPSLAND, VICTORIA, AS CARRIED ON BY THE CASSILIS MINING COMPANY, N. L.** By W. Aphin. T. Au. I. M. E., vol. 9, p. 224. 10 pages. I. D
- TREATMENT OF SULPHIDE ORES IN VICTORIA** By S. Radcliff and J. Druertmann. Min. & Sci. Press, vol. 99, p. 367. 3 columns
- MILLING AT GRASS VALLEY AND NEVADA CITY** By G. E. Wolcott. E. & M. J., vol. 87, p. 439 10 columns I
- SCHEMES OF CONCENTRATION AT COBALT.** M. & M., vol. 31, p. 303 9 columns. I
- CONCENTRATION AT COBALT, ONTARIO.** By G. E. Sancton. M. & M., vol. 29, p. 200 4½ columns. I
- METHODS OF CONCENTRATION AT COBALT, ONTARIO** By G. E. Sancton. J. C. M. I., vol. 11, p. 340. 8 pages.
- HYDROMETALLURGICAL OPERATIONS AT COBALT.** By J. Tyssowski. E. & M. J., vol. 90, p. 1253. 15½ columns. D.
- MILLING IN THE CRIPPLE CREEK DISTRICT, COLORADO** By S. A. Worcester. E. & M. J., vol. 87, p. 956. 5½ columns.
- See also **WASHING COAL AND MINERAL PRACTICE AT THE CAMP BIRD MILL.** Min. & Sci. Press, vol. 97, p. 669. 1½ columns.
- SEPARATION OF MIXED SULPHIDES AT CHARCAS, SAN LUIS POTOSI** By R. C. Canby. E. & M. J., vol. 85, p. 698. 5 columns.
- SOME FEATURES OF SILVER ORE TREATMENT IN MEXICO** By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 8, p. 203, 6½ columns; p. 266, 7 columns; p. 352, 2 columns; p. 384, 4 columns; vol. 19, p. 10, 7 columns; p. 97, 1½ columns.
- RIO PLATA MINE AND MILL, WESTERN CHIHUAHUA.** By H. J. Baron. E. & M. J., vol. 87, p. 147. 14 columns. I.

- MILLING GOLD AND SILVER ORES AT
TAJO ROSARIO, MEXICO T A I M.
E., vol 41, p 333 5 pages I
- MILLING AND CYANIDE PRACTICE AT
EL ORO, MEXICO By C T Rice
E. & M J, vol. 87, p 683 23 col-
umns I
- THE DOS ESTRELLAS MILL. Min. &
Sci Press, vol 96, p 197. 3 col-
umns I
- MILLING AND CYANIDE PRACTICE,
SAN PROSPERO MILL, GUANAJUATO
By J S Butler Min & Sci Press,
vol. 97, p. 130 5 columns D
- See also CYANIDING ORES
- METHOD OF CONCENTRATION AT THE
GRANADENA MINES, MEXICO Min
& Sci Press, vol 97, p 397. 3½ col-
umns. Flow-sheet
- SAN YGNACIO MINE AND MILL, CHI-
HUAHUA, MEXICO. By O Perogallo
E. & M J., vol 88, p. 1263. 6½ col-
umns. I
- MILL OF THE MONTEZUMA MINES,
COSTA RICA E. & M. J., vol 90,
p 715. 6 columns
- THE SAN RAFAEL MILL AT PACHUCA.
By M. R. Lamb. E. & M J, vol.
86, p 325. 3 columns.
- JESUS MARIA AND FLORES MILLS,
GUANAJUATO By C T Rice E.
& M. J., vol. 86, p. 615. 13 col-
umns I
- HACIENDA BUBURON, AN OLD MEXICAN
SILVER MILL. By M. R. Lamb.
E. & M. J, vol. 86, p. 663. 6 col-
umns. I.
- THE NEW ESPERANZA MILL AT EL
ORO, MEXICO. By C. T. Rice. E.
& M. J., vol. 86, p. 760 5 col-
umns. I.
- MINING AND MILLING AT STOCKTON,
UTAH. By Robt. B. Brinsmade.
E. & M. J., vol. 85, p. 611. 6 col-
umns. I.
- BOSTON SUNSHINE MILL, UTAH. By
G. W. Wood. Min & Sci Press,
vol. 99, p. 295. 2½ columns. I.
- MILLS AND MILLING AT RAWHIDE,
NEVADA. E & M J, vol 87, p.
347. 4½ columns I
- WORKING OF ORES AT THE AUBURN
MILL, NEVADA Min & Sci. Press,
vol 22, p. 248 2½ columns
- YELLOW JACKET MILL, COMSTOCK
LODE. By W Symmes Min &
Sci Press, vol 97, p. 157 3½ col-
umns I
- THE BUTTERS SLIME-FILTER AT THE
CYANIDE PLANT OF THE COMBINA-
TION MINES COMPANY, GOLDFIELD,
NEVADA By M R Lamb T A. I.
M. E, vol 38, p 200 10 pages. I.
- See also CYANIDING OF ORES.
- THE GOLDFIELD CONSOLIDATED 600-
TON MILL By P. E Barbour E.
& M. J, vol. 86, p 467 22½ col-
umns I
- MILLING PRACTICE IN NEVADA GOLD-
FIELD REDUCTION WORKS. By E.
S Leaver Min. & Sci Press, vol 97,
p 254 2½ columns I.
- TREATMENT OF SULPHIDE ORES AT
GOLDFIELD, NEVADA Milling Pro-
cess Min & Sci. Press, vol 96,
p 841. 8 columns. I Flow-sheet.
- GOLDFIELD MILL IMPROVEMENTS.
Min & Sci. Press, vol. 99, p 825.
1 column
- EQUIPMENT AND PRACTICE AT FLO-
RENCE-GOLDFIELD MILL. By H.
G. Morris E & M. J., vol 89,
p. 365 9½ columns I.
- MILLING AT COMBINATION MILL, GOLD-
FIELD, NEVADA By M R Lamb M.
& M, vol. 29, p 209. 1 column I.
- THE COMBINATION MINE By E. A.
Collins Min. & Sci Press, vol. 95,
p. 397. 4½ columns, I.; p. 435,
6½ columns, I.
- CONCENTRATION PRACTICE AT THE
DESERT MILL, MILLERS, NEVADA.
Min & Sci. Press, vol. 95, p. 494.
8½ columns. I.
- THE DESERT MILL, MILLERS, NEVADA.
By A. R. Parsons. Min. & Sci.
Press, vol. 95, p. 494. 8½ columns. I.

- MILLING PLANT OF THE MONTANA-TONOPAH MINING COMPANY** By G. H. Rotherham. Min & Sci. Press, vol 97, p. 324 7½ columns. I.
- TONOPAH EXTENSION MILL** By J. G. Kirchen. Min & Sci. Press, vol. 100, p. 522 4 columns
- NEW MILL OF THE TONOPAH EXTENSION MINING COMPANY.** E. & M. J., vol 89, p 1066. 3 columns I.
- MILLING AT TONOPAH, NEVADA.** E & M. J, vol 87, p. 595. 6 columns. I.
- MINING AND REDUCTION OF ELY, NEVADA, ORES.** By R. L. Herrick. M. & M., vol. 29, p. 167. 11½ columns I.
- PITTSBURG SILVER PEAK MILL, NEVADA.** By H. Hanson M. & M., vol. 29, p. 569. 8½ columns. I.
- MECHANICAL TREATMENT OF GOLD ORE.** By W. J Adams. Min. & Sci Press, vol 95, p 374 1½ columns
- See also **AMALGAMATION.**
- IMPROVEMENTS IN THE HOMESTAKE MILL.** Min. & Sci Press, vol. 95, p. 812 1 column I.
- SIMMER DEEP AND JUPITER REDUCTION WORKS** By J. E Thomas Min. & Sci Press, vol. 99, p. 396 6½ columns. I.
- CONCENTRATION OF FLAKE GRAPHITE** By F D. Chester. E & M. J., vol 88, p 824. 3½ columns
- See also **OCCURRENCE OF GRAPHITE.**
- UTILIZATION OF IRON SANDS.** Min. & Sci Press, vol. 20, p. 355. 1 column.
- See also **SAND TREATMENT.**
- TREATMENT OF THE BRUCE IRON ORE, ONTARIO.** J. C. M. I., vol. 10, p 160. 2 pages
- CONCENTRATION OF MESABI ORE.** By H. H Stock. M. & M., vol 29, p. 97. 3½ columns. I.
- MILLING PRACTICE AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA.** E. & M. J., vol. 89, p. 422. 4 columns. I. Flow-sheet.
- MINE AND MILL OF LE ROI No 2, LTD, ROSSLAND, BRITISH COLUMBIA.** By R H Allen. E. & M J, vol. 89, p. 176. 5½ columns. I.
- TABLE CONCENTRATION IN THE COEUR D'ALENE DISTRICT.** Min. Mag., London, vol. 2, p 444. 4 columns. I
- MILLING OF LEAD-SILVER ORE.** By G. Caetani Min. Mag., London, vol 2, p 361, 14 columns, I, p. 441, 12 columns, I; p. 48, 16 columns, I
- ORE DRESSING IN THE COEUR D'ALENE DISTRICT.** By E. S Wiard. E & M. J, vol 88, p 1055, 13½ columns, I, p 1104, 16 columns, I., p. 1205, 21 columns, I
- TREATMENT OF ORE IN THE COEUR D'ALENE LEAD REGION.** Min. & Sci Press, vol. 96, p 626. 3 columns I
- MILLING IN THE COEUR D'ALENE.** By G. Huston Min & Sci. Press, vol. 96, p. 232 1½ columns.
- NEW CONCENTRATOR OF THE BUNKER HILL AND SULLIVAN.** By G Caetani. Min. & Sci Press, vol 100, p 120 5½ columns. I.
- ORE DRESSING IN THE COEUR D'ALENE DISTRICT.** By E. S Wiard E & M. J, vol 89, p. 20, 23 columns, I.; p. 375, 7½ columns, I; p. 514, 13½ columns, I, p 570, 7½ columns, p. 822, 10 columns, p 875, 7½ columns, I., p 967, 8½ columns, I.
- CONCENTRATING DIFFICULT LEAD ORES AT BROKEN HILL, NEW SOUTH WALES.** By G. W Williams. E. & M. J., vol 87, p. 939. 6 columns.
- ORE TREATMENT AT THE BROKEN HILL PROPRIETARY MINE.** By G. D Delprat T. Au. I. M E, vol. 12, p. 1. 28 pages. I.
- CONCENTRATION AT THE BLUE BELL MINE, BRITISH COLUMBIA.** E. & M. J., vol 88, p. 785. 2½ columns.
- THE AMERICAN MILL AT ORONOGO, JOPLIN DISTRICT** By Doss Brittain. E. & M. J, vol. 85, p. 1039. 6½ columns. I.

- IMPROVEMENTS IN THE ORONOGO CIRCLE MILL No 5.** By O. Ruhl E. & M J., vol. 86, p. 993. 5 columns. I.
- RECLAIMING ZINC AND LEAD ORES.** By L. L. Wittich M. & M., vol. 30, p. 503. 4½ columns I.
- ORE DRESSING IN THE JOPLIN DISTRICT.** M. & M., vol 30, p. 383 3½ columns I
- SOUTHEAST MISSOURI MINING** By S. S. Clarke Min & Sci. Press, vol. 100, p. 528. 2 columns.
- MILLING AT DOE RUN, SOUTHEAST MISSOURI.** E & M. J., vol 89, p 610. 2 columns I
- THE MINING AND MILLING OF SILVER-LEAD AND ZINC ORES AT PIERREFITTE MINES, FRANCE.** By W.W Van Ness T A. I. M. E., vol. 39, p 369. 22½ pages I.
- CONCENTRATION OF SILVER-LEAD ORES.** By V. F. S. Low. T Au. I. M. E., vol. 10, p. 197. 16 pages. I.
- CONCENTRATION OF LEAD-SILVER ORES.** By V. F. S. Low. T Au I. M. E., vol. 11, p 164 12 pages. I
- DRESSING OF ORES: A Freiberg Process.** Min. & Sci Press, vol. 20, p. 2, 1½ columns, p. 66, 1½ columns, I., p. 130, 1 column, I.
- WET CONCENTRATION AT MIDVALE, UTAH.** By L. A. Palmer M & M, vol 30, p. 517 5½ columns. I.
- CONCENTRATION AT FREIBERG, GERMANY.** E. & M. J., vol. 87, p. 988. 1½ columns.
- METHOD OF MILLING LEAD ORES AT THE CUMBERLAND MINES, ENGLAND.** E & M J., vol. 85, p 299 2 columns I.
- MILLING FLORIDA PHOSPHATES.** E & M J., vol. 87, p 490. 8 columns I.
- See also OCCURRENCE OF PHOSPHATES.
- TIN-DRESSING.** By H W. Hutchin. Min. Mag., London, vol 2, p. 295. 3 columns
- NOTES ON TIN DRESSING** By H. W. Hutchin T. I M & M., vol. 18, p 69. 38½ pages. I.
- NOTES ON TIN ORE DRESSING AT SOUTH CROFTY.** E & M. J, vol 87, p. 651 4 columns.
- TIN-DRESSING AT STANLEY HILLS, NORTH QUEENSLAND** By W. L. Cleland T. Au I. M. E., vol 12, p. 154. 10 pages I.
- CONCENTRATION OF TIN ORES AT CHOROLQUE, BOLIVIA** Min. Mag., vol. 4, p. 214 2 columns. D.
- TIN MINING AND MILLING IN THE BOLIVIAN ANDES** By G W Dean. E. & M J, vol 90, p. 1053. 5½ columns I
- ZINC MINING IN NEW JERSEY.** By H. B. Kummel E. & M J., vol. 87, p. 11. 1½ columns
- THE GREAT BOULDER PERSEVERANCE MILL** Min Mag, vol. 4, p. 388. ½ column Flow-sheet
- CONCENTRATION AT CATAMA, CHILE.** By F. A. Sundt M & M., vol. 31, p. 605. 3½ columns

CONCRETE, MORTARS, AND PLASTERS

- Cement and Concrete: Their Properties and Uses**
- LIME IN CEMENT.** Min. & Sci. Press, vol. 95, p. 282. ½ column.
- PORTLAND CEMENT CALCULATIONS.** M & M., vol 31, p. 25. 1½ columns.
- PORTLAND CEMENT.** By J. L. Howard. Min. & Sci. Press, vol. 98, p. 630. 8½ columns.
- PORTLAND CEMENT** Min. & Sci. Press, vol. 96, p 170. ½ column.
- THE MANUFACTURE OF PORTLAND CEMENT.** By W. M. Kinney. P. E Soc. W. Pa., vol. 25, p. 103. 36 pages. I.
- NOTES ON THE BRITISH STANDARD SPECIFICATION FOR PORTLAND CEMENT, AND OBSERVATIONS ON THE**

- USE OF WATER AND CONCRETE IN STRUCTURAL WORK. By W. Watts. T. I. M. E., vol. 37, p 318 13 pages
- CALCULATING THE HEAT BALANCE OF LIME KILNS By Robt Schott. E. & M J, vol 85, p. 613. 6 columns.
- CHARACTERISTIC TESTS OF CEMENT By L. L. Kimball U. S. G. S., Mineral Resources, 1904
- COMBUSTION IN CEMENT-BURNING By B E Eldred T. A. I. M. E., vol. 41, p. 479, 10½ pages; p 905, 3½ pages
- PORTLAND CEMENT MORTARS AND THEIR CONSTITUENT MATERIALS; Results of Tests Made at the Structural-Materials Laboratories, Forest Park, St Louis, Missouri. By R. L. Humphrey. U. S. G. S., Bull. 331 130 pages. I 1908
- ON THE EMPLOYMENT OF RUBBLE BÉTON OR CONCRETE IN WORKS OF ENGINEERING AND ARCHITECTURE. By J Rennie Min Mag, vol 10, p. 60. 4 pages.
- TESTS OF CONCRETE By R L Humphrey M. & M., vol 29, p. 159 1½ columns.
- THE BOND BETWEEN CONCRETE AND STEEL. By T. L. Condon. J W Soc. E., vol. 12, p. 100 17½ pages. I.
- DEFORMED BARS VS ROUND RODS ANCHORED FOR REINFORCED CONCRETE. By J. H. Toupet. P. E. Soc. W. Pa., vol. 25, p. 505 35 pages. I.
- REINFORCED CONCRETE TRETTLES FOR RAILWAYS By C. H. Cartledge J W. Soc E, vol. 15, p. 543 30 pages I.
- BONDING NEW TO OLD CONCRETE. P C. M. & M Soc. S. A, vol. 10, p. 156. ½ column.
- STRENGTH OF CONCRETE JOINTS. By J. L. Miner. P. E. Soc. W Pa., vol. 24, p. 471. 20½ pages. D.
- STRENGTH OF CONCRETE BEAMS. By R. L. Humphrey. U. S. G. S., Bull. 344. 59 pages. 1908.
- NOTES ON CONCRETE CONSTRUCTION. By R. A Cummings. P E Soc W. Pa., vol. 26, p. 159. 28 pages. I
- FORMS FOR CONCRETE By J. D. Stevenson P. E. Soc. W. Pa., vol. 26, p 270 46 pages. I.
- HOW TO PREVENT FAILURE IN CONCRETE CONSTRUCTION By W. Michaels. J. W. Soc. E, vol 12, p 455. 18 pages.
- CONCRETE BOATS AND BARGES. Min. & Sci Press, vol. 97, p. 95 ½ column.
- Use of Concrete in Mines**
- FILBERT MINE CONCRETE-LINED SHAFTS. By A. F. Allard and H. S. Patterson M & M., vol 30, p. 557. 17 columns. I.
- SINKING CONCRETE SHAFTS IN QUICKSAND By F W Adgate. E & M. J, vol 88, p. 1159 9½ columns I.
- CONCRETE LININGS IN SHAFT SINKING. By R. H. Rowland E. & M J, vol 88, p. 359. 7 columns. I.
- CONCRETE SHAFT LINING. Min & Sci. Press, vol. 97, p 745. 6½ columns. I.
- BRIER HILL CONCRETE-LINED SHAFT, VULCAN, MICHIGAN. By W. Kelly. E & M. J., vol 89, p. 970 6 columns. I.
- CONCRETE SHAFT LININGS. M. & M., vol. 29, p. 563. 6½ columns I
- CONCRETE SHAFT LINING. Min & Sci. Press, vol 95, p 183 4½ columns. I.
- CONCRETE SHAFT LININGS. T. L. S. M. I., vol 15, p. 92 4½ pages I.
- THE BRIER HILL CONCRETE-LINED SHAFT. By W. Kelly T. L. S. M. I., vol. 14, p. 140. 6 pages. I.
- CONCRETE LINED SHAFTS SUNK THROUGH QUICKSAND. T. L. S. M. I., vol. 14, p. 55. 16 pages. I.

CONCRETE SHAFT LINING M. & M., vol. 31, p. 516. 10 columns I

METHOD OF SINKING AND CONCRETING THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p. 558 4 columns I.

SINKING REINFORCED CONCRETE SHAFTS THROUGH QUICKSAND. By F. W. Adgate T L S. M I., vol. 14, p. 55 16 pages I

CONCRETE SHAFTS THROUGH QUICKSAND. By F. W. Adgate M & M., vol. 30, p. 271. 5½ columns I

SINKING A REINFORCED CONCRETE MINE SHAFT By A H Fay E & M. J., vol. 88, p. 599. 4½ columns I.

SINKING A REINFORCED CONCRETE SHAFT By L L Brown Min & Sci Press, vol. 97, p. 745 6½ columns I

STEEL FORMS FOR CONCRETE SHAFT LINING M. & M., vol. 30, p. 557. 1 column

STEEL FORMS USED IN LINING THE BRIER HILL MINE WITH CONCRETE. E & M J., vol. 89, p. 971 1 column. I.

FORMS FOR CONCRETING SHAFTS M. & M., vol. 30, p. 634. ¼ column.

SINKING IN WET GROUND BY INJECTING CONCRETE. Cementation. By J Lombois E & M J., vol. 87, p. 653. 8½ columns I.

THE USE OF CEMENT FOR TUBBING IN DEEP SHAFTS E & M. J., vol. 86, p. 427. 1 column

CONCRETE-STEEL CAISSONS Their Development and Use for Breakwater, Piers and Revetments. By W. V. Judson. J W. Soc. E., vol. 14, p. 533. 76 pages. I.

NORTH LAKE CONCRETE SHAFT AND FOUNDATION FOR STEEL HEADFRAME E. & M. J., vol. 88, p. 722. 1 column. I.

REINFORCED CONCRETE FOUNDATIONS FOR STAMP BATTERIES. By S. J. Truscott T. I. M. & M., vol. 18, p. 25. 12 pages. I.

See also STAMP MILL PRACTICE.

CONCRETE ENGINE FOUNDATION By A. H. Shaw M & M., vol. 30, p. 170. 1½ columns. I

SOME DETAILS OF CONCRETE CONSTRUCTION, RETAINING WALLS, ETC. By L J Hotchkiss J W Soc E., vol. 12, p. 349 23 pages. I

See also FOUNDATIONS FOR BUILDINGS and MINE CONSTRUCTIONS

CONCRETE IN THE HUDSON RIVER TUNNELS By W M. Torrance. J W Soc E., vol. 13, p. 632 30 pages I

SPECIAL CONCRETE STRUCTURES IN THE HUDSON RIVER TUNNELS. By W M Torrance J. W. Soc. E., vol. 13, p. 632 30 pages I

See also TUNNEL SUPPORT

AMOUNT OF CONCRETE USED IN LINING THE CONCRETE SHAFT AT THE FILBERT MINE, PENNSYLVANIA M. & M., vol. 30, p. 565 Table.

METHOD OF CONCRETING SHAFTS M. & M., vol. 30, p. 633. 2 columns I.

USE OF CONCRETE IN THE CLONAN SHAFT, MINEVILLE, NEW YORK By G C. Stoltz. E & M. J., vol. 85, p. 111 1½ columns

CONCRETE FOR SHAFT TRACKS P. C. M. & M Soc S. A., vol. 10, p. 415. ¾ column.

See also MINE ROADS AND TRACKS.

THE USE OF CONCRETE FOR MINE SUPPORT. By W R Crane. T. I. M. E., vol. 37, p. 560. 26 pages. I.

CONCRETE IN MINE SUPPORT. By W. R. Crane. Min & Sci. Press, vol. 98, p. 320. 11 columns. I.

See also MINE SUPPORT.

CONCRETE MINE PROFS USED IN GERMANY. E. & M. J., vol. 88, p. 414. 1 column. I

See also METHODS OF TIMBERING

CAPACITY OF CIRCULAR VATS PER FOOT OF DEPTH. By W. A. Caldecott. Min. & Sci. Press, vol. 101, p. 412. Table.

A CONCRETE TANK TO STORE TAILING Min. & Sci. Press, vol. 95, p. 337. 1½ columns I.

CEMENT CONCRETE VATS AND TANKS. By A. Mayer M. & M., vol. 31, p. 364. ½ column

REINFORCED CONCRETE TANKS By L. Mess. Min & Sci Press, vol. 97, p. 123 3 columns I

See also **TANKS FOR MINING PURPOSES.**

See also **COST OF CONCRETE-SHAFT LINING.**

See also **KINDS OF SUPPORT, TIMBER, ETC.**

See also **MINE AND MILL CONSTRUCTION and COST OF SUPPORT.**

CONVEYORS FOR MINERAL AND COAL

Kinds of Conveyors, Operation, Etc.

KEYSTONE RIVETLESS CONVEYOR CHAIN M & M., vol. 30, p. 187 2 columns. I.

A NEW STEEL BELT CONVEYOR IN USE IN SWEDEN. By A. Gradenwitz. E. & M J., vol. 90, p. 455. 9 columns. I.

ROBINS BELT-CONVEYOR SYSTEM FOR HANDLING COAL T I. M E., vol. 36, p. 643. 5 pages I.

Conveyors Underground

SHAKING CHUTES IN RAND MINES. P. C. M. & M. Soc. S A., vol. 10, p. 281 1½ columns. I

SWINGING CHUTES FOR COAL MINES. E. & M J., vol. 87, p. 362. 3½ columns I.

CONVEYOR SYSTEM AT THE NEW KLEINFONTEIN MINE. By E. J. Way. E. & M. J., vol. 85, p. 888. 13½ columns D.

UNDERGROUND CONVEYORS AT THE KLEINFONTEIN MINE. By E. J. Way E. & M J., vol. 86, p. 715. 3½ columns.

CONVEYORS IN COAL MINES. E & M. J., vol. 90, p. 1069 2 columns I.

CONVEYOR FOR HANDLING COAL IN THE MINE, ENGLAND E. & M. J., vol. 87, p. 798. 1½ columns.

See first volume of Index.

COSTS OF MINING, MILLING, AND METALLURGICAL OPERATIONS

Cost Keeping

COST-KEEPING IN MINES Min. & Sci Press, vol. 97, p. 119. 1½ columns.

CONCERNING COSTS By G. Huston Min & Sci. Press, vol. 94, p. 630. 2½ columns.

ANALYSIS OF WORKING EXPENDITURE. The Witwatersrand Goldfield, p. 433.

GATHERING ENGINEERING COST DATA. By H. P. Gillette. Sch. Mines Quart., vol. 25, p. 358 10 pages

THE ART OF COST ESTIMATING, CAUSES OF UNDERESTIMATES, AND AMBIGUITY OF SPECIFICATIONS By H. P. Gillette. Earthwork and Its Cost. Introduction.

COMPUTING EXPENSE AND PROFITS IN MINING A Decision. E. & M. J., vol. 76, p. 860.

DETERMINATION OF MINING COSTS. E. & M J., vol. 75, p. 213.

COST PER TON AS A BASIS FOR MINE VALUATION. By R. G. Brown. E. & M J., vol. 76, p. 309. 2½ columns.

ELEMENTS OF UNCERTAINTY IN ESTIMATING AVERAGE COSTS OF MINING AND REDUCTION. E. & M. J., vol. 47, p. 561. ½ column.

WORKING COSTS: Considerations and Illustrations. Min. & Sci. Press, vol. 87, p. 179 2 columns.

REDUCING COSTS. Min. & Sci. Press, vol. 87, p. 197. ½ column.

50 COST OF MINING, MILLING, METALLURGY, ETC.

UNIFORM COST RETURNS. By W A. Prickard. E & M J., vol. 76, p. 655. 1½ columns.

MINING ECONOMY E & M J., vol 19, p. 85. 1½ columns.

THEORY OF VALUE. Min. & Sci. Press, vol. 38, p 70 2½ columns.

CORRECT COSTS, OR THE PARALLEL COLUMN IN THE COUNTING-ROOM. Min. & Sci Press, vol. 70, p. 395. 1½ columns

ENGINEER'S ESTIMATES OF COSTS E & M. J., vol 78, p. 464 2 columns

MINING COSTS. A Suggestion. By R. G Brown. Min & Sci Press, vol. 92, p 37. 2 columns.

A DECADE OF PROGRESS IN REDUCING COSTS By C Kirchhoff. T. A I M. E., vol. 29, p 352

DIFFICULTY IN USING MINING COSTS. Min & Sci Press, vol 82, p 199.

ECONOMIZING TIME. Costs Min. & Sci Press, vol. 88, p 326

FACTORS ENTERING INTO THE CALCULATION OF COSTS IN MINING T A. I. M. E., vol. 22, p 95. 9 pages.

COST OF MINING. By R G Brown E & M. J., Mar. 23, 1905, p. 573. 2 columns.

PROFIT AND LOSS IN MINING. Col Engr. & Met Miner, vol. 17, p 368.

COST (PERCENTAGE) OF SUPERINTENDENCE, INCIDENTALS AND CONTRACTOR'S PROFIT. R. R. Construction, Webb, p. 137.

CONTRACTOR'S COST-SHEET ON THE TRANSVAAL. Min. Mag, vol. 12, pp. 273, 274.

COST ACCOUNTS. Min & Sci. Press, vol. 76, p. 372 1½ columns.

COST ACCOUNTS OF GOLD MINING. T. A. I. M. E., Feb., 1906, p. 1327. Table.

MINE COST ACCOUNTS. E. & M. J., vol. 66, p. 363. ½ column.

SUMMARY OF CHARGES WHICH MUST BE BORNE BY A PROPERTY BEFORE IT CAN BE CALLED A MINE E & M. J, vol 74, p 344. ½ column

See also MINE ACCOUNTS AND BOOK-KEEPING

See also MINE ORGANIZATION.

Cost of Accidents

CATASTROPHES IN AMERICAN MINES. M. & M., vol 30, p. 595 4½ columns.

COST OF INJURIES TO MINERS M. & M, vol 31, p 411 Table.

MONEY VALUE OF HANDS AND FINGERS. Min & Sci Press, vol 70, p 185. ½ column

COST OF AN AIR-COMPRESSING LIFE-SAVING APPARATUS. T F.I. M. E., vol. 13, p. 138

ESTIMATE OF COST OF AN AVERAGE DISTRICT REFUGE CHAMBER. E & M J, vol. 90, p 427 1 column. Table.

See also CHAMBERS OF REFUGE, and ACCIDENTS IN MINING.

Cost of Blasting

COST OF BLASTING DOWN COAL IN SOUTHERN INDIANA. E & M. J., vol. 90, p. 870. ½ column

COST OF INSTALLATION OF ELECTRICAL FIRING SYSTEM IN COAL MINES. E. & M. J, vol. 87, p 246. ¾ column.

COST OF INSTALLING ELECTRICAL SHOT-FIRING SYSTEM IN COAL MINES M & M, vol. 29, p 39. ½ column

COST OF ELECTRIC SHOT FIRING. E. & M. J, vol 89, p. 880. 1½ columns

See also BLASTING IN MINES, AND USE OF EXPLOSIVES IN MINING.

Cost of Cyaniding

CYANIDE COSTS. Min. & Sci. Press, vol. 96, p. 803. ½ column.

- COST OF CYANIDING. Min. & Sci. Press, vol. 65, p. 204. 2 columns.
- CYANIDE COSTS. Min. & Sci. Press, vol. 97, p. 46. 1 column.
- COST OF CYANIDING ORES E. & M J., vol. 78, p. 954. Table.
- GENERAL MILLING AND CYANIDATION COSTS. Min. & Sci. Press, vol. 94, p. 22. Tables.
- COST OF CYANIDING ARGENTIFEROUS CONCENTRATE E & M J., vol. 80, p. 109.
- COST OF CYANIDING PLANT AND TREATMENT. Min. & Sci. Press, vol. 84, p. 112, Note; vol. 85, p. 3.
- COST OF CYANIDING SULPHO-TELLURIDE ORES E. & M. J., vol. 76, pp. 53 and 54
- COST OF TREATING GOLD SANDS. Min. & Sci. Press, vol. 69, p. 292. 1 column.
- COST OF HANDLING SANDS IN CYANIDE VATS AT VIRGINIA CITY, NEVADA. E. & M J., vol. 76, p. 851.
- See also SAND TREATMENT.
- COST OF TAILINGS TREATMENT. Gold Min. and Mill W Aus., pp. 253, 272, 273, 275, 276, 279, 281, 285, 286 Tables.
- COST PER TON OF TREATING 46,500 TONS OF TAILINGS AT THE COMSTOCK LODGE, NEVADA T. A. I. M E., vol. 19, p. 231.
- COST OF CYANIDING REFRACTORY TAILINGS ON THE WITWATERSRAND T. A. I. M E., vol. 11, p. 113. Table.
- COST OF CYANIDING AND GENERAL EXPENSES OF REWORKING AN OLD DUMP Min. & Sci. Press, vol. 80, p. 576. Tables.
- COST OF PRECIPITATION FROM CYANIDE SOLUTIONS BY ZINC SHAVINGS AND DUST. P. C. M & M. Soc. S. A., vol. 9, p. 223. 1 column
- COST OF ZINC IN CYANIDING, WESTERN AUSTRALIA. Gold Min and Mill W. Aus., p. 255.
- COST OF CYANIDING Gold Min. and Mill. W Aus., p. 257.
- COST OF POTASSIUM CYANIDE AND ZINC ON THE RAND—1902 Witwatersrand Goldfields, p. 457. Table.
- See also CHEMISTRY; METHODS AND PRACTICE.
- COST OF FILTER PRESS TREATMENT. J. C & M. Soc. S. A., vol. 3, pp. 29, 30, 31, 32, 36, 37, 40
- COST OF FILTERING WITH THE BUTTERS FILTER. Min. & Sci. Press, vol. 94, p. 820. Tables.
- COST OF BUTTER'S FILTER OPERATION. Min. & Sci. Press, vol. 94, p. 432. Tables.
- COST OF MAINTENANCE OF FILTER AT THE NORTH STAR MINES. Min. & Sci. Press, vol. 99, p. 715. Table.
- COST OF SLIME FILTERING AT WAIHI, NEW ZEALAND P. C. M & M. Soc. S. A., vol. 8, p. 14. $\frac{1}{2}$ column.
- COST OF FILTER PRESSING AT THE COMBINATION MINE, GOLDFIELD, NEVADA M. & M., vol. 27, p. 299 $\frac{1}{2}$ column.
- COST OF CYANIDING SLIMES J. C. & M Soc. S. A., vol. 2, p. 96 Tables.
- COST OF CYANIDING SLIMES. E. & M J., vol. 71, p. 83.
- COST OF CYANIDING SLIMES AT THE PALMAREJO MINE, MEXICO. T. A. I. M E., vol. 36, p. 287. Table.
- COST OF SLIME TREATMENT AT THE NORTH STAR MINES Min. & Sci. Press, vol. 99, p. 715 Table.
- COST OF CYANIDE TREATMENT OF SLIMES AT NICARAGUA. T. I. M. & M., vol. 7, p. 66. Table.
- COST OF CYANIDING SLIMES AT THE HOMESTAKE PLANT. Min. & Sci. Press, vol. 97, p. 353. Table.
- COST OF SLIME TREATMENT AT THE HOMESTAKE SLIME-PLANT. Min. & Sci. Press, vol. 97, p. 353. Table.

- COST OF SLIME TREATMENT AT EL ORO MEXICO** T. A. I. M. E., vol. 37, p. 35. Tables
See also **SLIMES AND THEIR TREATMENT**.
- COST OF CYANIDING ON THE RAND.** T. I. M. & M., vol. 7, p. 138. Table.
- COST OF CYANIDING IN RHODESIA.** Min. & Sci. Press, vol. 90, p. 138. Tables.
- WORKING COST OF THE ROBINSON CYANIDE WORKS, THE RAND** Gold Mines of the Rand, p. 237 Table.
- CYANIDING ON THE RAND.** Gold Mines of the Rand, pp. 232, 261, 265
- COST OF CYANIDING IN RHODESIA. SOUTH AFRICA.** T. I. M. E., vol. 31, p. 79 Table.
- COST OF CYANIDING, SOUTH AFRICA.** J. C. & M. Soc. S. A., vol. 1, pp. 262, 264, 287, 288, 290, 291, 309, 310, 311, 312, 313. Table.
- COST OF MILLING AND CYANIDING IN WESTERN AUSTRALIA.** E. & M. J., vol. 74, p. 541. $\frac{1}{2}$ column.
- COST OF LIXIVIATING PARRAL, MEXICO.** E. & M. J., vol. 47, p. 256.
- COST OF ORE TREATMENT: Cyaniding, at Kalgoorlie.** E. & M. J., vol. 76, p. 228. Tables.
- COST OF MILLING AND CYANIDING AT KALGOORLIE.** E. & M. J., vol. 80, p. 4.
- COST OF CYANIDING IN WESTERN AUSTRALIA.** Gold Min. and Mill. W. Aus., pp. 195, 212, 271, 272, 273, 275, 276, 279, 281, 285, 286, also Chap. 9, pp. 290-444. Tables.
- CYANIDING COSTS AT CRIPPLE CREEK.** M. & M., vol. 28, p. 422. Table; p. 483. Tables.
- COST OF CYANIDING, COLORADO.** Min. & Sci. Press, vol. 76, p. 538. Table.
- COST OF CYANIDING IN SOUTHWESTERN COLORADO.** Min. & Sci. Press, vol. 84, p. 254.
- COST OF CYANIDING IN THE BLACK HILLS, SOUTH DAKOTA.** Min. & Sci. Press, vol. 83, p. 246. Table.
- COST OF CYANIDING IN THE BLACK HILLS.** E. & M. J., vol. 69, p. 228.
- COST OF CYANIDING IN SOUTH DAKOTA.** Min. & Sci. Press, vol. 84, p. 233. Table; p. 307 Tables.
- COST OF CYANIDING IN THE HOMESTAKE MILLS.** Min. & Sci. Press, vol. 95, p. 22. Table
- COST OF CYANIDING AT THE HOMESTAKE MINE** Min. & Sci. Press, vol. 87, p. 269. Table; p. 270. Table; p. 271. Table
- COST OF CYANIDING AT HOMESTAKE: Comparison with Other Mills.** Min. & Sci. Press, vol. 86, p. 151. Tables.
- COST OF CYANIDING IN THE BLACK HILLS.** E. & M. J., vol. 75, p. 373.
- COST OF CYANIDING IN BLACK HILLS.** Min. & Sci. Press, vol. 89, pp. 176, 178, 311, 424, 425. Tables.
- CYANIDING COST AT NUSAN, KOREA.** Min. & Sci. Press, vol. 100, p. 606. Table
- COST OF CYANIDE-TREATMENT OF SILVER-ORES IN MEXICO** T. A. I. M. E., vol. 35, pp. 26, 27, 28, 29, 30, 31.
- COST OF CYANIDING SILVER-GOLD ORES OF THE PALMAREJO MINE, MEXICO.** T. A. I. M. E., vol. 36, p. 264 Table.
- COST OF CYANIDING AT THE TAJO, ROSARIO MILL, MEXICO.** T. A. I. M. E., vol. 41, p. 367 Table.
- COST OF CYANIDING AT PARRAL, MEXICO.** Min. & Sci. Press, vol. 98, p. 489. $1\frac{1}{2}$ columns. Tables.
- COST OF CYANIDING IN MEXICO** T. A. I. M. E., vol. 40, p. 767. Table
- COST OF CYANIDING IN MONTANA.** Min. & Sci. Press, vol. 76, p. 642. Table
- COMPARATIVE COSTS IN CYANIDING IN THE SOUTH AND WEST** Min. & Sci. Press, vol. 88, p. 146. Table.
- See also **CYANIDING GOLD AND SILVER, and PRACTICE IN MILLING ORES.**

Cost of Industrial Chemistry

- COST OF INSTALLATION AND OPERATION OF SULPHURIC ACID PLANT.** E. & M. J., vol. 80, p. 636.

COSTS OF BRIMSTONE VS. PYRITES FOR ACID MAKING. E. & M. J., vol. 35, p. 251. 2½ columns.

COMPARATIVE COSTS OF PRODUCING SULPHURIC ACID FROM BRIMSTONE AND PYRITES E. & M. J., vol. 54, p. 76.

COST OF PRODUCTION OF SODIUM HYPOSULPHITE. T. A. I. M. E., vol. 20, p. 26

COST OF PRODUCTION OF HYDROBORATE OF LIME. T. I. M. E., vol. 23, pp. 458, 459, 461, 462, 463.

MANUFACTURING COST OF VANADINITE. M & M, vol. 26, p. 353. Table

Cost of Chlorination

COST OF CHLORINATION OF GOLD ORES: 75 Ton Plant. Min. & Sci. Press, vol. 75, p. 573. Table.

COST OF GOLD CHLORINATION IN CALIFORNIA. Min. & Sci. Press, vol. 49, p. 54. Tables.

COST OF CHLORINATION IN THE BLACK HILLS. E & M. J., vol. 69, p. 228

COST OF CHLORINATION OF ORES. Min. & Sci. Press, vol. 74, p. 283. Table.

COST OF CHLORINATION. E. & M. J., vol. 67, p. 467.

COST OF CHLORINATION. T. A. I. M. E., vol. 15, p. 308

COST OF BARREL CHLORINATION AT BUNKER HILL. Sch. Mines Quart., vol. 11, p. 146. 2 pages.

THE COST OF BARREL CHLORINATION. By J. E. Rothwell. E. & M. J., vol. 55, p. 269. ½ column

COST OF LIXIVIATION AT LAKE VALLEY. Min. & Sci. Press, vol. 52, p. 256. ½ column.

COST OF LIXIVIATION OF LOW GRADE SILVER ORES. Min. & Sci. Press, vol. 67, p. 341. ½ column.

COST OF CHLORINATION AT HODSON, CALIFORNIA. Min. & Sci. Press, vol. 89, p. 139 Table.

COST OF CHLORINATING CRIPPLE CREEK ORES. E. & M. J., vol. 79, p. 795. 1½ columns.

See also CHLORINATION OF GOLD AND SILVER.

Cost of Development

COST OF DEVELOPMENT. The Witwatersrand Goldfields, p. 296.

COST OF DEVELOPMENT. P. C. M. & M. Soc. S. A., vol. 7, p. 8. 1½ columns.

COST OF DEVELOPMENT WORK. Min. & Sci. Press, vol. 50, p. 412. Table.

COST OF DEVELOPMENT: Winzes, Raises, and Drifting. Witwatersrand Goldfields, p. 296. 10 pages.

COST OF DEVELOPMENT IN WESTERN AUSTRALIA. Gold Min. and Mill. W. Aus., pp. 195, 197, 210, 212, 214. Tables.

COST OF DEVELOPMENT IN WESTERN AUSTRALIA. Min. & Sci. Press, vol. 93, p. 687. Table.

COST OF DEVELOPMENT WORK ON THE RAND. Miner's Pocket Book, Lock, p. 222. Tables.

COST OF MINE DEVELOPMENT IN RHODESIA. E. & M. J., vol. 76, p. 886. Table.

COST OF MINE DEVELOPMENT, RHODESIA. Min. & Sci. Press, vol. 90, p. 106. Table.

COST OF DEVELOPMENT AND EQUIPPING A MINE IN THE RAND, SOUTH AFRICA. T. I. M. & M., vol. 12, p. 275. Table.

COST OF DEVELOPING A MINE BY TURNED, CENTRAL AND SOUTHERN VERTICAL SHAFTS IN SOUTH AFRICA GOLD FIELDS. Sch. Min. Quart., vol. 21, p. 16.

COST OF OPENING AND DEVELOPING OF A DRIFT MINE. M. & M., vol. 25, p. 458. Table.

AN APPROXIMATE ESTIMATE OF THE OPENING AND DEVELOPMENT OF A DRIFT MINE. M. & M., Apr., 1905, p. 458.

COST OF DEVELOPMENT WORK CENTRE STAR MINING COMPANY, BRITISH COLUMBIA. Min. & Sci. Press, vol. 84, p. 33. Table.

MINING AND DEVELOPMENT COSTS AT UNSON, KOREA. Min. & Sci. Press, vol. 100, p. 606. Table.

DEVELOPMENT COSTS IN MEXICO. Min. & Sci. Press, vol. 98, p. 583. $\frac{1}{2}$ column. Table.

COST OF DEVELOPMENT AT THE ESPERANZA MINE, EL ORO, MEXICO. Min. & Sci. Press, vol. 99, p. 825. Table.

DEVELOPMENT COSTS AT THE ESPERANZA MINE: Shaft Sinking, Driving Cross Cuts and Drifts, and Sinking Winzes. Min. & Sci. Press, vol. 100, p. 519. Table.

EXPENSES OF DEVELOPMENT IN SONORA, MEXICO. By F. J. H. Merrill. E. & M J., vol. 83, p. 1138. $1\frac{1}{2}$ columns.

See also DEVELOPMENT, ETC.

Cost of Drainage

COST OF DRAINAGE OF THE COMSTOCK LODGE. Min. & Sci. Press, vol. 33, p. 433.

COST OF MINE DRAINAGE: Considerations. Min. & Sci. Press, vol. 88, p. 294. $1\frac{1}{2}$ columns.

COST OF UNWATERING AN OLD MINE IN MEXICO. Min. & Sci. Press, vol. 98, p. 655. 1 column. Table.

See also MINE DRAINAGE.

Cost of Dams, Etc.

COST OF DAM CONSTRUCTION. Min. & Sci. Press, vol. 91, p. 154. Table.

COST OF A CAST-IRON DAM TO RESIST OUTBURST OF WATER. T. I. M. E., vol. 32, pp. 93, 94. Tables.

See also PROTECTION IN MINING, AND INUNDATIONS IN MINES.

COST OF CONSTRUCTING A REINFORCED CONCRETE RESERVOIR AT FORT MEADE, SOUTH DAKOTA. Eng-Cont., vol. 27, p. 91. $8\frac{1}{2}$ columns.

COST CONSTRUCTION OF CRIBBING FOUNDATION FOR BENTON MILLS DAM, CALIFORNIA. Min. & Sci. Press, vol. 84, p. 33. Table.

COST OF PARTS OF MELONES DAM CONSTRUCTION. Min. & Sci. Press, vol. 84, p. 128. Tables.

COST OF RESTRAINING WORKS FOR MINING DEBRIS. Proceedings California Miner's Assoc. Annual, 1906, p. 125. Table.

See also DAMS FOR MINING PURPOSES, AND MINING DEBRIS.

Cost of Dredging

COST OF DREDGING. Min. & Sci. Press, vol. 98, p. 556 $\frac{1}{2}$ column. Tables.

COST OF DREDGING. Min. & Sci. Press, vol. 41, p. 332. $\frac{1}{2}$ column.

THE COST OF DREDGING. E. & M J., vol. 81, p. 142. 2 columns

COST OF DREDGING. Min. & Sci. Press, vol. 94, p. 278. Note.

COST OF GOLD DREDGING AT OROVILLE, CALIFORNIA. E. & M. J., vol. 48, p. 380. Table.

COST OF DREDGING. M. & M, Apr., 1901, p. 401 $\frac{1}{2}$ column

DREDGING COSTS. E. & M. J., vol. 78, p. 541. 1 column.

COST OF OPERATING DREDGING MACHINES. By John Bogat. Engineering, London, vol. 74, p. 290. $5\frac{1}{2}$ columns

COST OF RUNNING A GOLD-DREDGE FOR A WEEK. T. I. M. E., vol. 21, p. 377. Table.

COST OF OPERATING DREDGES (GOLD). Proceedings California Miner's Assoc. Annual, 1906, p. 112

WORKING COSTS IN GOLD DREDGING. Min. & Sci. Press, vol. 91, p. 178. Table.

COST OF OPERATING A GOLD-DREDGE. T. A. I. M. E., vol. 40, p. 514 $1\frac{1}{2}$ pages

CAPACITY AND COST OF DREDGING. Chicago Drainage Canal. Engineering, London, vol. 63, p. 753. Table.

COST OF DREDGING: Types of Dredges; Cost by Dipper Dredge; Cost by Grapple Dredge; Cost by Bucket Elevator Dredge; Cost by Hydraulic Dredge; and Contract Prices of Dredging.

EARTHWORK AND ITS COST. Gillette, Chapter 16.

COST OF DREDGING FOR GOLD IN ALASKA. E. & M. J., vol. 80, p. 212. Note

COST OF DREDGING, WESTERN AUSTRALIA. Gold Min. & Mill W. Aus., p. 453. Notes

COST AND PROFITS OF GOLD DREDGING IN NEW ZEALAND. Engineering, London, vol. 68, p. 35.

COST OF GOLD DREDGING IN NEW ZEALAND. Min. & Sci. Press, vol. 85, p. 279. Table.

COST OF BUCKET DREDGING IN NEW ZEALAND. T. A. I. M. E., vol. 12, pp. 54-56.

COST OF GOLD DREDGING IN CALIFORNIA. Min. & Sci. Press, vol. 88, p. 93. Tables.

COSTS AND PROFITS OF GOLD DREDGING IN CALIFORNIA. E. & M. J., vol. 71, p. 120.

WORKING COSTS OF GOLD DREDGING IN CALIFORNIA. By C. Janin and W. B. Winston. Min. & Sci. Press, vol. 101, p. 150. 2½ columns. Table

COST OF DREDGING IN THE RIVERS OF FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 585. 1 page. I.

COST OF DREDGING ON THE SNAKE RIVER, IDAHO, WITH A SUCTION DREDGER. E. & M. J., vol. 73, p. 241.

COST OF AN ELEVATOR DREDGER (CHAIN-BUCKET TYPE) IN THE SAME LOCALITY AS ABOVE. E. & M. J., vol. 73, p. 242.

COST OF GOLD-DREDGING IN THE URALS. T. A. I. M. E., vol. 37, p. 326. Table.

COST OF GOLD DREDGING IN THE URALS. Min. & Sci. Press, vol. 93, p. 228. Table.

COST OF DREDGING IN RUSSIA. By W. H. Shockley. Min. & Sci. Press, vol. 100, p. 636. 4½ columns. Tables.

See also **DREDGING.**

Cost of Drilling and Boring

COST OF BORING WELLS IN DIFFERENT KINDS OF MATERIAL. Well-Boring, C. Isler, p. 67.

COST OF DRILLING EQUIPMENT FOR DEEP DRILLING. E. & M. J., vol. 84, p. 880. Table

RATE (COST) OF BORING ARTESIAN WELLS. Min. & Sci. Press, vol. 56, p. 183. Note.

ROCK BORING BY MACHINERY ECONOMICALLY SUCCESSFUL. Min. & Sci. Press, vol. 19, p. 232. ¼ column

COST OF DRILLING OUTFIT FOR ARTESIAN WELLS AND OTHER DEEP BORING. Min. & Sci. Press, vol. 37, p. 289. 1 column.

COST OF ARTESIAN WELLS, SAN FRANCISCO. Min. & Sci. Press, vol. 37, p. 354, ½ column; vol. 38, p. 18

COST OF A 5-IN. BORE-HOLE, 1,809 FEET DEEP. T. I. M. E., vol. 15, p. 120. Table.

COST OF LARGEST BORE-HOLE IN EUROPE. Engineering, London, vol. 71, p. 25. 1½ columns.

COST OF DRIVING WELLS. Well-Boring. C. Isler, p. 39. Table

DRILLING COSTS IN TASMANIA TIN DEPOSITS. M. & M., vol. 31, p. 314. Tables.

COST OF DRILLING FOR OIL IN MEXICO. Min. Mag., London, vol. 3, p. 286. Table.

ON THE RELATIVE COSTS OF MINING NARROW VEINS: Hand Drills vs. Air Drills. By J. E. Hardman. J. M. Soc. N. S., vol. 3, p. 55. 5½ pages.

COST OF POWER VS HAND-DRILLING ON LAKE SUPERIOR. E. & M. J., vol. 35, p. 6. ¾ column.

See also **HAND DRILLS.**

SPEED AND COST OF DRILLING. Miner's Pocket Book, Lock, pp. 173, 174, 175, 176, 177, 178, 179.

COST AND COMPARATIVE COSTS OF HAND AND MACHINE DRILLING.

- Miner's Pocket Book, Lock, pp. 209, 210. Tables.
- RELATIVE COSTS OF LARGE AND SMALL DRILLS IN DEVELOPMENT WORK. T A I. M. E., vol. 37, p. 86. Tables.
- COST OF DRILLING IN VARIOUS KINDS OF ROCK, SOUTH NORWAY. T. I. M & M, vol 7, p. 339. Table.
- ESTIMATING COST OF OPERATING POWER DRILLS Min. & Sci. Press, vol. 89, p. 387. $\frac{1}{2}$ column.
- COST OF OPERATING MACHINE DRILLS, PORTLAND MINE, COLORADO. T A. I. M E., Feb., 1906, p. 1305. Table.
- RATES AND COSTS OF DRILLING. The Witwatersrand Goldfields, p. 382.
- COST OF MACHINE DRILLING IN THE RAND MINE Witwatersrand Goldfields, p. 382. 5 pages Tables
- COST OF OPERATING DRILLS BY KAF. FIRS AND WHITE LABOR P. C. M & M Soc. S. A., vol 8, p. 219. 2 columns.
- COST OF DRILLING ON THE RAND Min. & Sci. Press, vol. 94, p. 337. Table.
- COST OF MACHINE DRILLS AND OPERATION AT THE PORTLAND MINE, COLORADO T A. I. M E., vol. 37, p. 97. Table.
- COST OF DRILLING Machine Work. Min. & Sci. Press, vol. 100, p. 861. $\frac{3}{4}$ column.
- See also MACHINE OR POWER DRILLS.
- COST OF HAND VS. AIR DRILLS IN MINING NARROW VEINS Coll. Eng & Met Miner, vol. 14, p. 267 $1\frac{1}{2}$ columns.
- FIRST-COST AND WORKING COSTS OF AN INGERSOLL-SERGEANT HEADING-MACHINE PLANT. T. I. M E., vol. 31, pp. 370, 371, 372, 373, 374.
- COST OF MAINTENANCE OF ROCK DRILLS Min. & Sci. Press, vol. 89, p. 422. Table.
- COST OF ELECTRIC DRILLING. Min. & Sci. Press, vol. 87, p. 39. Table.
- COST OF OPERATING ELECTRIC DRILLS. Min. & Sci. Press, vol. 89, p. 163. Table.
- COST OF ELECTRIC DRILLING IN DIORITE. T I. M & M, vol. 10, pp. 222 and 225.
- TWO RECORDS OF COSTS IN DRILLING ROCK WITH ELECTRIC AIR DRILLS. E. & M. J, vol 88, p 310. $2\frac{1}{2}$ columns.
- COST OF DRILLING COAL BY ELECTRIC DRILL. M & M, vol. 17, p 485. Table.
- See also ELECTRIC DRILLS.
- COST OF CHURN DRILLING E. & M. J, vol 89, p. 1005. $\frac{1}{2}$ column
- COST OF CHURN DRILLING AT MIAMI, ARIZONA. M. & M, vol. 30, p. 752. $\frac{1}{2}$ column. Table
- COSTS OF CHURN DRILLING AT SILVERBELL, ARIZONA E & M. J., vol. 90, p 851. Table
- COST OF CHURN DRILLING AT ELY, NEVADA. M & M, vol. 29, p. 527. $\frac{1}{2}$ column.
- COST OF CHURN DRILLING AT ELY, NEVADA. M & M, vol. 29, p. 81. Tables.
- COST OF DRILLING BY CHURN-DRILL, IN ILLINOIS OIL FIELD Min & Sci. Press, vol 99, p 616. $\frac{1}{2}$ column.
- COST OF CHURN AND DIAMOND DRILLING IN WISCONSIN. E. & M J, vol. 81, p 1233.
- COST OF ROPE DRILLING. Second Geol Sur Pa., AC, p. 39.
- COST OF PROSPECT BORING BY ROPE SYSTEM Miner's Pocket Book, Lock, p. 136. Tables.
- SPEED AND COST OF SPRING-POLE DRILLING Sch. Min. Quart., vol 16, p. 21. 2 pages. Tables.
- COST OF DRILLING 15- TO 20-FOOT HOLES BY CHURN DRILL: 2 Men Operating Min. & Sci. Press, vol. 91, p. 3.
- COST OF OPENING OIL WELLS IN EASTERN ILLINOIS. Min. & Sci. Press, vol. 99, p. 680. Table.

- COST OF DRILLING RIG FOR OIL-WELL WORK.** Min. & Sci. Press, vol. 101, p. 776. 2 columns Tables.
- COST OF CASING FOR OIL-WELL DRILLING.** Min. & Sci. Press, vol. 101, p. 776 Tables.
- PROSPECT DRILLING IN THE KANSAS GAS FIELDS FOR HOLES 1200 TO 1500 FEET DEEP.** E. & M. J., Sept. 12, 1903, p. 396 $\frac{1}{2}$ column.
- COST OF PROSPECT DRILLING AT JOPLIN.** M. & M., vol. 29, p. 7. $\frac{1}{2}$ column.
- COST OF DRILLING BY CHURN DRILL AT GALENA, KANSAS.** Univ. Geol. Sur. of Kans., vol. 8, p. 340. $1\frac{1}{2}$ pages.
- COST OF CHURN DRILLING IN THE MESABI IRON RANGE, MINNESOTA.** E. & M. J., vol. 75, pp. 896 and 897.
- See also CHURN DRILLS AND DRILLING, and PROSPECT DRILLING.
- COST OF OPERATING A STEAM PROSPECT DRILL IN ALASKA.** E. & M. J., vol. 86, p. 220. Table.
- COST OF DRILLING FOR DREDGING.** Min. & Sci. Press, vol. 87, p. 39. Table.
- COST OF DIAMOND DRILLING IN WESTERN AUSTRALIA BY TON AND OUNCE.** M. & M., vol. 24, p. 175. Tables.
- COST OF DIAMOND DRILLING.** E. & M. J., vol. 81, p. 1054 $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING.** Min. Mag., London, vol. 2, p. 390 $\frac{3}{4}$ column.
- SCHEDULE OF PRICES FOR BORE-HOLES: Diamond Drilling.** T. F. I. M. E., vol. 1, p. 20. Table.
- COST OF DIAMOND DRILLING, LAKE SUPERIOR.** E. & M. J., vol. 81, p. 236.
- COST OF DIAMOND DRILLING.** M. & M., vol. 20, p. 244 $\frac{1}{2}$ column.
- NOTES ON COST OF DIAMOND DRILLING.** By J. J. Jordan. M. & M., Feb., 1902, p. 321. $\frac{1}{2}$ column.
- COSTS OF DIAMOND DRILLING IN THE BOUNDARY DISTRICT, BRITISH COLUMBIA.** By F. Keffer. M. & M., vol. 28, p. 508. 3 columns.
- COST OF DIAMOND DRILLING.** Min. & Sci. Press, vol. 75, p. 241.
- DETAILED COST OF DIAMOND DRILLING AT BOUNDARY DISTRICT, BRITISH COLUMBIA.** M. & M., vol. 27, p. 177 Tables.
- NOTE ON THE COST OF DIAMOND DRILLING.** By J. J. Jordan. T. I. M. & M., vol. 9, p. 297. 3 pages.
- COST OF DIAMOND DRILLING: In Canada, Michigan, and Minnesota.** T. F. C. M. I., vol. 1, p. 206, etc.
- COST AND TIME OF DRILLING THROUGH DIFFERENT MATERIALS WITH DIAMOND DRILL (CROTON AQUEDUCT).** T. A. I. M. E., vol. 19, pp. 750, 751, 752, 753, 754.
- COST OF DIAMOND DRILLING IN WEST AFRICA.** T. I. M. & M., vol. 12, pp. 319 and 320.
- COST OF DIAMOND DRILLING IN THE TRANSVAAL, SOUTH AFRICA.** T. I. M. & M., vol. 6, p. 172, etc.
- COST AND RESULTS OF GEOLOGICAL EXPLORATIONS WITH THE DIAMOND DRILL IN THE ANTHRACITE REGIONS OF PENNSYLVANIA.** By L. A. Riley. T. A. I. M. E., vol. 5, p. 303.
- COST OF BORING BY DIAMOND DRILL IN NOVA SCOTIA.** E. & M. J., vol. 19, p. 272. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING.** Labor, Reaming and Casing, Carbons, Cost of Bit per Foot, Water, and Fuel Diamond Drilling. G. A. Denny, pp. 84, 86, 87, 92 and 93.
- COST OF DIAMOND DRILLS AND SUPPLIES.** Diamond Drilling. G. A. Denny, p. 154.
- COST OF DIAMOND DRILLING WELL-BORING.** C. Isler, pp. 170, 171 and 172.
- COST OF DIAMOND DRILLING.** M. & M., Dec., 1901, p. 207. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING.** Second Geol. Sur., Pa., AC, p. 42. Tables.

- COST OF DIAMOND DRILLING, WESTERN AUSTRALIA Gold Min. & Mill., W. Aus., pp. 155, 156.
- COST OF DIAMOND DRILLING ON THE RAND. Witwatersrand Goldfields, pp. 147 and 148. Table
- COST OF DIAMOND DRILLING Min. & Sci. Press vol 90, p 8. $\frac{1}{2}$ column
- COST OF DIAMOND DRILLING IN MESABI IRON RANGE E. & M. J., vol 75, pp. 896-897.
- COST OF DIAMOND DRILLING AT MOUNT BISCHOFF TIN MINES. Tin Deposits of the World, p. 172.
- COST OF DIAMOND DRILLING: New South Wales, South Africa, Mexico, Etc. Miner's Pocket Book, Lock. pp. 141, 142. 2 pages.
- DIAMOND DRILLING IN LAKE SUPERIOR AMYGDALOIDAL ROCK, SANDSTONE AND CONGLOMERATE 1904 E. & M. J., vol. 81, p 236.
- COST OF DRILLING WITH TERRY ROTARY SHOT DRILL. E. & M J., vol. 89, p 1157. $\frac{1}{2}$ column.
- COST OF DIAMOND, CALYX AND HAND DRILLING. Min. & Sci. Press, vol. 82, p. 239.
- COST OF DIAMOND DRILL WORK: Cost of Plant, Drilling, Etc. Min. & Sci. Press, vol 81, p. 404.
- COST OF DIAMOND DRILL WORK: Cost of Plant, Drilling, Etc Min. & Sci. Press, vol. 82, pp. 59, 239, 252 and 281. Table.
- COST OF WASH DRILL BORING ON THE GREAT LAKES AND ATLANTIC SHIP CANAL SURVEY. Eng-Cont., vol. 27, pp. 108, 132. 4 columns.
- COST OF DIAMOND DRILL BORING IN THE COLORADO COAL MEASURES. Eng-Cont., vol. 27, p. 112. $\frac{1}{2}$ column.
- COST OF DIAMOND DRILLING IN BASALT AND SOFTER SEDIMENTS, AUSTRALIA. Min. Mag., vol. 11, p. 139.
- COST OF DIAMOND DRILLING. J. M. Soc. N. S., vol. 9, pp. 80, 87, 88, 89, 92. 4 pages.
- COST OF DIAMOND DRILLING, ENGLAND. P. C M., vol. 1, p. 123. Table
- COST OF DIAMOND DRILLING IN WEST AFRICA T. I. M. & M., vol. 12, p 320. Table.
- NOTE ON COST OF DIAMOND DRILLING. By J J Jordan. T I. M. & M., vol. 9, p. 297 4 pages.
- COST OF DIAMOND DRILLING IN COAL MEASURES By W. F. Murray. E. & M J, vol. 83, p. 384. 2 columns.
- PROSPECTING ANTHRACITE MINES BY BORE HOLES. E. & M J, vol. 88, p. 258.
- COST OF DIAMOND DRILLING IN THE ANTHRACITE FIELDS, PENNSYLVANIA. The Anthracite Coal Industry, Roberts, p 24 1 page.
- COST OF CORE BORING. M. & M., vol 31, p. 323. $\frac{1}{2}$ column. Table.
- COST OF DIAMOND DRILLING Min. & Sci. Press, vol. 95, p 461. $1\frac{1}{2}$ columns
- THE COST OF DIAMOND DRILLING FOR COAL IN PENNSYLVANIA By E E. White. E. & M. J, vol. 87, p. 649. $2\frac{1}{2}$ columns Tables.
- NOTES ON THE COST OF DIAMOND DRILLING IN THE BOUNDARY DISTRICT. By F Keffer. J C. M. I, vol. 11, p. 385. 6 pages.
- COST OF DIAMOND DRILL BORING. Sch. Mines Quart., vol. 16, pp. 21, 23 and 24. Table.
- See also PROSPECT DRILLING.
- PRICE OF DIAMONDS Min & Sci. Press, vol. 96, p. 32. $\frac{1}{2}$ column.
- DUTY ON DIAMONDS FOR DRILLS. E. & M. J., vol 85, p. 1001 $\frac{1}{2}$ column.
- THE PRICE (COST) OF DIAMONDS. E. & M. J., vol. 80, p 640. 1 column.
- COST OF BLACK DIAMONDS FOR DRILLING. Min. & Sci. Press, vol. 89, p. 420.
- COST OF DIAMONDS AND DIAMOND DRILLING PER FOOT IN METAL

- MINING. Ann. Min., Rept. N. S. Wales, 1899, p. 20.
- COST OF CARBON (DIAMONDS) PER FOOT IN DRILLING. J. M. Soc. N. S., vol. 9, p. 74 Table.
- COST ANALYSIS OF STONE (DIAMOND) CONSUMPTION IN UNDERGROUND DIAMOND DRILLING. By B. H. Case. E. & M. J., vol. 88, p. 420 2 columns. Table.
- COST OF WEAR OF IRON BIT IN DIAMOND DRILLING. Min. & Sci. Press, vol. 85, p. 173.
- See also DIAMOND AND ROTARY DRILLS.
- COST OF DRIVING DRIFTS WITH THE MURPHY AIR-HAMMER DRILL E. & M. J., vol. 80, p. 362.
- See also AIR HAMMER DRILLS, AND COST OF SHAFT SINKING.
- Cost of Excavating**
- COST OF EARTH AND ROCK EXCAVATION ESPECIALLY FOR RAILROAD WORK. R. R. Construction, Webb, p. 400. Table.
- COST OF EXCAVATING ROCK IN LARGE MASSES. E. & M. J., vol. 84, p. 205. $\frac{1}{2}$ column. Table.
- COST OF A BLAST AT BINGHAM CANYON AND QUANTITY OF ROCK BROKEN: Open-cut Work. M. & M., vol. 29, p. 161. $\frac{1}{2}$ column. I.
- COST OF SHOVELING. E. & M. J., vol. 80, p. 160.
- COST OF LOOSENING AND SHOVELING: Cost of Plowing, of Picking and of Shoveling. Earthwork and Its Costs. By H. P. Gillette. Chap. 3, p. 24. 7 pages.
- METHODS AND COSTS OF LOADING DUMP WAGONS WITH SCRAPERS, AND THE DESIGN OF A LOADING PLATFORM. Eng.-Cont., vol. 27, p. 36. $3\frac{1}{2}$ columns.
- COST OF HANDLING EXCAVATED MATERIALS: Cost of Dumping, Spreading, Ramming, Rolling, Sprinkling and Trimming. Earthwork and Its Costs. H. P. Gillette. Chap. 4, p. 37. 6 pages.
- COST OF HAND-SHOVELING. R. R. Construction, Webb, p. 126
- COST OF SPREADING EARTH. R. R. Construction, Webb, p. 135.
- COST OF WHEELBARROWS AND CARTS: Rules for Estimating Cost. Earthwork and Its Costs. By H. P. Gillette. Chap. 5, p. 37. 3 pages.
- COST OF LOOSENING SOIL WITH PLOWS. R. R. Construction, Webb, pp. 125, 139. $\frac{1}{2}$ page.
- COST OF LOOSENING SOIL BY PICK. R. R. Construction, Webb, pp. 126, 139 $\frac{1}{2}$ page
- COST OF REMOVING OVERBURDEN AT THE "JAYA" MINE, SPAIN, PER CUBIC YARD IN THE SOLID: Calculating on the Total Quantity Removed During 1891. T. A. I. M. E., vol. 21, p. 92.
- COST BY BUCK AND DRAG SCRAPERS: Two Examples of Cost by Buck Scrapers Three Examples of Cost by Drag Scrapers; Errors of Trautwine's Tables; Rule for Estimating Cost. Earthwork and Its Cost, Gillette, Chapter 7, p. 47.
- COST OF GRADING AND TRIMMING AN ATHLETIC FIELD. By D J Hauer. Eng.-Cont., vol. 27, p. 14. $2\frac{1}{2}$ columns
- COST OF CLEARING JUNGLE, ETC., in SUMATRA. T. A. I. M. E., vol. 20, p. 73
- COST OF CLEARING AND GRUBBING LAND AND BLASTING STUMPS. Eng.-Cont., vol. 27, p. 95. 6 columns.
- COST OF CLEARING AND GRUBBING, ESPECIALLY IN RAILROAD WORK. R. R. Construction, Webb, pp. 395 and 400. Table.
- COST OF STEAM SHOVEL WORK UNDERGROUND. M. & M., vol. 29, p. 575. Tables.
- COST DATA ON STEAM SHOVEL WORK. Eng.-Cont., vol. 27, p. 4. 6 columns.

COST OF STEAM SHOVEL WORK: Especially Loading. R R Construction, Webb, p 127. 1½ pages.

COST OF STEAM SHOVEL WORK IN PLACER MINE IN ALASKA. Min. & Sci. Press, vol 91, p 178 Table.

COST OF STEAM SHOVEL EXCAVATING: Output; Power Required and Cost; Cost of Moving; and Rule for Estimating Cost Earthwork and Its Cost, Gillette, Chap 10, p. 70

COST DATA ON THE CONSTRUCTION OF AN EGG-SHAPED SEWER AT SPRINGFIELD, MASSACHUSETTS Eng.-Cont, vol 27, p 28 1 column.

METHODS AND COSTS OF CONSTRUCTING A LARGE REINFORCED CONCRETE SEWER AT ST LOUIS, MISSOURI. Eng.-Cont, vol 27, p. 76 4 columns. I.

GENERAL COSTS OF EXCAVATING IN CROTON AQUEDUCT: Average Cost of Driving a Single Heading; of Excavating Bench T. A. I. M. E., vol. 19, p 758

COST OF WORK ON THE CHICAGO MAIN DRAINAGE CANAL J. W Soc E, vol. 1, p 227. 19 pages

THE COST OF HYDRAULIC EXCAVATION: Amount of Water Required, Cost of Filling Railroad Trestles by Sluicing; Cost of Dam Filling; and Cost of Placer Gravel Mining. Earthwork and Its Cost, Gillette, Chapter 15.

COST OF REMOVING HELL'S GATE. E. & M J., vol 40, p. 290. Tables
See also **SUBMARINE BLASTING, AND EXCAVATION OF EARTH, ROCK, AND ORES, ETC.**

Cost of Explosives and Blasting

COST OF BLASTING AT GALENA, KANSAS Univ. Geol. Sur of Kan, vol 8, p. 344. ½ column

COST OF BLASTING IN DIFFERENT KINDS OF ROCK. E & M. J, vol. 25, p. 273. 1 column

COST OF BLASTING. R R. Construction, Webb, pp. 126, 144, and 400.

RELATIVE COST OF MINING WITH AND WITHOUT POWDER, ENGLAND T N S. I. M & M. E, vol. 4, pp 54, 56 Tables.

METHODS AND COSTS OF BLASTING AND HANDLING BOULDERS. Min & Sci Press, vol 90, p. 86 3½ columns

COST OF EXPLOSIVES PER TON ORE AT ALASKA-TREADWELL MINES, 1903 E & M J, vol. 78, p 740

COST OF BLASTING ON THE RAND, AUSTRALIA AND ELSEWHERE. Miners' Pocket Book, Lock, p 182 1 page

COST AND EFFICIENCY OF SAFETY EXPLOSIVES AS COMPARED WITH GUNPOWDER By H Hall T. F. I. M. E., vol 13, p. 4. 56 pages

COST OF EXPLOSIVE GELATINE E & M J, vol 38, p 103. ½ column

COST OF GUNPOWDER, ENGLAND T N S I M & M E, vol. 2, p 156

COMPARATIVE COST OF COMMON AND GIANT POWDER IN BLASTING. The Mines of the West, Raymond, 1869, pp 35, 37 Tables

PRICES OF POWDER Min. & Sci Press, vol 48, p 385 ½ column

ADVANCE IN POWDER Min & Sci Press, vol 48, p. 419 ½ column

COST OF POWDER TO MONTANA COAL MINERS E & M J, vol 87, p 849 ½ column

COST OF GIANT POWDER WORK. Tunneling E. & M. J., vol 6, p 73 Table

GIANT POWDER: Comparative Figures Min. & Sci. Press, vol 18, p 66 ½ column

COST OF DYNAMITE AT BUTTE IN CARLOAD AND SMALLER LOTS, IN 1902 Min. & Sci Press, vol 85, p 249.

COST OF DYNAMITE AT KIMBERLEY DIAMOND MINES T N S. I. M. & M. E., vol. 10, p 102.

COST OF DYNAMITE ON THE RAND T. N. S. I. M & M E., vol 10, p. 137.

COST OF EXPLOSIVES ON THE RAND, 1902. Witwatersrand Goldfields, p. 457. Table.

COST OF EXPLOSIVES ON THE RAND 1895 Gold Mines of the Rand, pp. 247, 248 and 249.

COST OF EXPLOSIVES AT KIMBERLEY. Gold Min. & Mill. W. Aus., pp 454, 456 and 457

COST OF EXPLOSIVES, DETONATORS AND FUSE AND AMOUNT USED PER TON OF ORE MINED IN NEW SOUTH WALES, Ann Min Rept., N. S. Wales, 1899, p 104.

COST OF EXPLOSIVES AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb, 1906, p 1327 Table.

COST OF EXPLOSIVES IN WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., pp 177, 206, 208 and 214

COST OF EXPLOSIVE PER TON ORE AT GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill, W Aus, p. 616. Table.

COST OF EXPLOSIVES, WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., p. 454 Table.

COST OF EXPLOSIVES IN TUNNEL DRIVING Min & Sci Press, vol. 34, p. 166 $\frac{1}{2}$ column.

COST OF EXPLOSIVES IN COAL MINING. Entry Work M & M, vol. 19, p. 58. Table

COST OF POWDER PER TON ANTHRACITE MINED IN PENNSYLVANIA The Anthracite Coal Industry, Roberts, p. 118.

COST OF POWDER IN THE ANTHRACITE COAL FIELDS OF PENNSYLVANIA The Anthracite Coal Industry, Roberts, p. 133. 3 pages.

See also **USE OF EXPLOSIVES IN MINING.**

COST OF MAMMOTH BLASTING. T. A. I. M. E., vol. 7, p. 285

See also **LARGE OR MAMMOTH BLASTS.**

COST OF SUBMARINE BLASTING, PORT FREMANTLE, AUSTRALIA. Gold Min. & Mill., W. Aus., p. 452.

See also **SUBMARINE BLASTING.**

Cost of Flume and Ditch Construction

COST OF FLUME CONSTRUCTION. Miner's Pocket Book, Lock, p 61. Notes.

COST OF FLUME CONSTRUCTION IN ALASKA Min & Sci. Press, vol. 71, p. 26.

COST OF MAKING OPEN-CUT FLUME: 7 Feet Wide at Bottom by 11,000 Feet Long \$27,000, or \$1 per Cubic Yard. E. & M. J. vol. 76, p 657.

COST OF FLUME AND DITCH CONSTRUCTION Min. & Sci Press, vol 74, pp 172, 173. Tables.

COST OF FLUMES. E. & M. J, vol. 75, p. 785. Table; vol. 76, pp. 267-268.

COST OF WOOD VS. STEEL FLUMES. J. C M. I, vol 6, p. 237.

COST OF SLUICE-BOX CONSTRUCTION. Min & Sci. Press, vol 53, p. 245. Table.

See also **HYDRAULIC MINING.**

COST OF CONSTRUCTING A CONCRETE CURB AND GUTTER AT OTTAWA, CANADA Eng-Cont, vol. 27, p. 116. 2 columns.

COST OF DITCHING (KIRKPATRICK). Miner's Pocket Book, Lock, pp. 47, 48. Tables.

COST OF DITCHING WITH PLOW AND SCRAPER. Min. & Sci Press, vol. 93, p. 683.

COST OF TRENCHING. M. & M., vol. 31, p. 694. Table.

RATE OF WORKING AND COST OF DITCH CONSTRUCTION Min & Sci. Press, vol. 95, p. 303. Table.

See also **DITCHES AND CHANNELS, AND HYDRAULIC MINING.**

Cost of Fuel

COST OF VARIOUS FUELS. T. A. I. M. E., vol. 40, p. 49. 5 pages.

COST OF ELECTRICITY AND WOOD IN MINES AND MILLS Min. & Sci. Press, vol 85, p. 104.

See also **ELECTRICITY IN THE MINE.**

62 COST OF MINING, MILLING, METALLURGY, ETC.

COMPARATIVE COST OF WOOD AND OIL FOR FUEL, SUTTER CREEK, CALIFORNIA Min. & Sci. Press, vol 84, p 35. Table

COST OF GENERATING HORSE POWER WITH WOOD, COAL, OIL, ETC., ON THE MOTHER LODGE E. & M. J., vol. 75, p. 149

COMPARATIVE COSTS OF FUEL. E & M J., vol 81, p. 180. $\frac{1}{2}$ column.

COST OF GASOLINE AND ELECTRIC POWER AT GOLDFIELD, NEVADA Min & Sci. Press, vol. 94, p 722.

See also TESTING FUELS AND THEIR VALUE.

COST OF FUEL AT THE KIMBERLEY DIAMOND MINES. T. N. S. I. M. & M. E., vol. 10, p. 108.

COST OF FUEL ON THE RAND, 1902 Witwatersrand Goldfields, p. 457. Table

SELLING PRICE IN ENGLAND OF COAL, PAST AND PRESENT. Coll. Working and Management, p. 23. 7 pages.

COST OF COAL ON THE RAND (1895). Gold Mines of the Rand, p 250. 2 pages.

COST OF COAL IN ALASKA, THE YUKON, ETC T. A. I. M. E., vol. 36, pp. 490 and 491

COST OF COAL FOR STEAM-POWER. Kent's Mech. Engrs. Pocket-Book. p 789. $\frac{1}{2}$ page. Table

COST OF ANTHRACITE COAL. E & M J., vol. 81, p 1051 $\frac{1}{2}$ column

PRICES OF AMERICAN AND CANADIAN COALS AT WINNIPEG FOR YEARS 1876-1896 E. & M J., vol. 62, p 127. Table

THE COST AND SELLING PRICES OF COAL AND COKE. E. & M. J., vol. 59, p 145. 1 column

AVERAGE PRICE OF COAL IN THE SEVERAL DISTRICTS OF NEW SOUTH WALES Ann. Min. Rept., N. S. Wales, 1899, p. 58

COMPARATIVE COST OF HAND AND POWDERED COAL FIRING. E. & M. J., vol. 81, p. 902. Tables.

COST OF COAL AND OIL COMPARED. E. & M. J., vol. 76, p. 381.

COST OF CHARCOAL MADE FROM ONE CORD OF WOOD T. A. I. M. E., vol 16, p. 198.

GERMAN COAL PRICES. E. & M. J., vol 75, p 717.

See also THE COMPOSITION AND CHARACTERISTICS OF COAL.

COST OF COKE T. A. I. M. E., vol. 17, p. 48

COST OF COKE-MAKING AT THE OLIVER COKE-WORKS, UNITED STATES T. I. M. E., vol 27, p. 499. Tables.

COST OF COKE MAKING. E. & M. J., vol. 54, pp. 250 and 268.

ESTIMATED COST OF ONE BEEHIVE COKE OVEN M. & M., vol 24, p. 5. Table.

COST OF COKE MADE AT DULUTH, MINNESOTA. T. A. I. M. E., vol. 16, p. 198

THE MANUFACTURE AND COST OF COKE. F Kocener. E. & M. J., vol. 42, pp. 291, 362, 399, 421 and 452.

COST OF PRODUCING CHARCOAL. E. & M. J., vol 40, p 306 $3\frac{1}{2}$ columns.

COST OF OPERATION OF BI-PRODUCT COKE OVENS M. & M., vol. 27, p. 255. Tables.

COST OF DRAWING COKE FROM OVENS BY MACHINE T. A. I. M. E., vol. 36, p. 359. Table.

See also COKE: Its Properties and Manufacture.

COST OF GAS POWER. E. & M. J., vol 84, p. 917. Table.

COST OF GAS POWER T. I. M. E., vol. 15, pp. 331, 334, 335, 338.

PRICE OF GAS AND COAL IN ENGLAND. E & M. J., vol. 82, p. 928.

PRICE OF GAS FUEL IN THE JOPLIN LEAD AND ZINC DISTRICT. E. & M. J., vol. 83, p. 965.

See also GAS FOR POWER, ETC.

PRICE OF OIL AND NATURAL GAS IN KANSAS CITY, 1906 E & M. J., vol 82, p. 880. $\frac{1}{2}$ column.

COST OF OIL FUEL FOR STEAM BOILERS Min & Sci Press, vol. 75, p 483. $\frac{1}{2}$ column.

COMPARATIVE COST OF OIL AND COKE AS A FUEL. M & M, vol 27, p 370. Tables

COMPARATIVE COST OF OIL AND COAL AS FUEL IN CALIFORNIA. Min. & Sci Press, vol 81, p. 437.

COST Crude Oil vs. Steam. By Wm. Magenan Min & Sci. Press, vol. 92, p 346. $1\frac{1}{2}$ columns.

THE PRICE OF OIL IN CALIFORNIA By W. Forstner Min Mag, vol. 4, p 300. 3 columns

FUEL COST OF POWER BY OIL Min. & Sci. Press, vol 84, pp. 231 and 345

COST OF PRODUCING AND DISTRIBUTING OIL. E. & M J, vol. 83, p 577. 2 columns.

COST OF OIL VS. COAL AS FUEL. E. & M J, vol. 83, p 247. 1 column.

COST OF CRUDE OIL EXTRACTION FROM SHALES IN FRANCE also other Cost as Distillation, Chemical Treatment, Etc. T F. I. M. E, vol 7, p 187.

See also POWER GENERATION BY OIL.

COST OF BRIQUETTING FUELS M & M., vol. 25, pp 365, 366. Table.

COST OF FUEL BRIQUETTING. T A. I. M. E, vol 41, pp. 265 and 266. Tables.

PROFITS IN THE MANUFACTURE OF FUEL BRIQUETTES: Cost per ton. E. & M J, vol 77, p. 566. 1 column.

ESTIMATED COST OF BRIQUETTES AND BRIQUETTING T. A. I. M E., vol. 35, pp. 101, 102, 103, 104, 105, 106, 107, 108.

COST OF BRIQUETTING IN FRANCE. E. & M. J., vol. 76, pp. 431, 432. Table.

COST OF LIGNITE BRIQUETTING. E. & M J., vol. 82, p 639. Tables.

COST OF BRIQUETTING PEAT, PER TON. E. & M J, vol. 80, p. 51.

See also BRIQUETTING OF FUELS AND ORES.

Cost of Handling and Storing

COST OF LOADING COAL INTO CARS IN MINES. E & M. J., vol 85, p. 815. 2 columns

GRAVEL SCREEN AND LOADING APPLIANCE Use of Scraper in Loading Wagons Eng.-Cont., vol. 27, p. 44. $\frac{1}{2}$ column. I

COST OF HANDLING ORE IN STOPES, RAND MINES, SOUTH AFRICA M. & M., vol. 27, p. 188. Table.

See also TRAMMING AND MUCKING

COST OF THE ERECTION OF A FINGER-CHUTE. Min. & Sci Press, vol 94, p. 794. Table. I.

See also CHUTES FOR LOADING CARS AND SKIPS

COST OF HANDLING RESIDUE AT KALGOORLIE Min. & Sci Press, vol. 95, p 370. Table.

COST OF MINING AND HANDLING COAL T A I. M. E, vol. 17, p. 48.

See also HANDLING AND STORAGE OF MINERAL

Cost of Haulage

COST OF UNDERGROUND HAULAGE IN PENNSYLVANIA MINES. Sch. Mines Quart., vol 2, p. 197. Tables

COST OF HAULAGE OF COAL IN MINES. T F. I. M. E, vol. 12, pp. 260, 265, 270, 271, 272, 276, 278.

COST OF HAULAGE IN ANTHRACITE MINES. Coal Mining Supplement E. & M. J., vol. 88, p. 27. $\frac{1}{2}$ column.

COST OF HAULAGE: Hand-putting (tramming), Pony, Horse-haulage, and Rope or Cham-haulage. T. F. I. M. E., vol. 13, p. 144. Table.

- COST PER TON MILE OF HAULING COAL IN PENNSYLVANIA MINES.** Second Geol. Sur. of Pa., AC, p. 214. Table.
- HAULAGE COSTS:** Mule Haulage, and Electric Haulage. M. & M., Mar., 1902, p. 379.
- COST OF HAULING COAL IN ALABAMA COAL MINES.** E. & M. J., vol. 54, p. 538
- RELATIVE COSTS OF DIFFERENT HAULAGE SYSTEMS:** Horse, Tail Rope, Electric, Endless Chain, and Endless Rope. Coll. Eng. & Met. Miner, vol. 14, p. 314
- COST OF SYSTEMS OF HAULAGE.** T. F. I. M. E., vol. 4, pp. 295, 297, 299, 300, 301, 302.
- COST OF INSTALLATION AND OPERATION OF HAULAGE PLANT AT STOCKETT, MONTANA.** M. & M., vol. 19, p. 276.
- COST OF MINE HAULAGE.** M. & M., vol. 21, p. 169. $\frac{1}{2}$ column.
- COST OF HAULAGE IN ALABAMA GOLD MINES.** E. & M. J., vol. 55, p. 486.
- COST OF HAULAGE IN THE ANTHRACITE FIELDS:** Animal, Compressed Air, Tail-rope and Electric. E. & M. J., vol. 84, p. 163.
- COST OF HAULAGE ON THE RAND.** Witwatersrand Goldfields, p. 402. $1\frac{1}{2}$ pages.
- COST OF HAULING AND PUMPING ON THE RAND.** Gold Mines of the Rand, pp. 259, 264 and 265. Table.
- SECONDARY HAULAGE:** Cost of Putting and Driving. By T. E. Forster and F. R. Simpson. T. I. M. E., vol. 15, p. 136. 5 pages.
- COSTS OF HAULAGE:** Maintenance, Wages, Interest and Depreciation. T. I. M. E., vol. 15, pp. 137, 138, 139.
- COST OF UNDERGROUND HAULAGE SYSTEMS.** T. F. I. M. E., vol. 7, pp. 363, 368
- COST OF HAULING EQUIPMENT FROM ALAMOSA TO RICO, COLORADO, IN THE EARLY DAYS.** U. S. G. S., 22d Ann Rept, pt. 2, p. 241.
- COST OF TRANSPORTATION IN DRIFT MINING.** Min. & Sci. Press, vol. 68, p. 165. Table
- See also HAULAGE SYSTEMS.
- COST OF ANIMAL HAULAGE.** E. & M. J., vol. 75, p. 331
- ITEMS REGARDING COST OF MULES FOR MINE HAULAGE.** E. & M. J., vol. 81, p. 669.
- COST OF ANIMAL HAULAGE IN COAL MINES OF TENNESSEE AND ALABAMA.** M. & M., vol. 26, p. 102. 4 columns
- RELATIVE COST OF MULE AND ELECTRIC HAULAGE IN COLLIERIES.** E. & M. J., vol. 81, p. 1102.
- COST OF ANIMAL HAULAGE UNDERGROUND.** T. F. I. M. E., vol. 13, p. 119.
- See also ANIMAL HAULAGE.
- COST OF MULE AND ELECTRIC HAULAGE.** E. & M. J., vol. 82, p. 976. Tables.
- COST OF INSTALLATION OF MULE AND ELECTRIC HAULAGE IN MINES.** E. & M. J., vol. 83, p. 530. Tables.
- COMPARATIVE COST OF MINE HAULAGE BY MULES AND ELECTRIC LOCOMOTIVES.** Eng.-Cont., vol. 27, pp. 95, 138 $2\frac{1}{2}$ and 3 columns.
- COST OF INSTALLING AN ELECTRIC HAULAGE PLANT.** T. L. S. I. M. E., vol. 4, pp. 16 and 22.
- COST OF STEAM AND ELECTRIC HAULAGE.** E. & M. J., vol. 37, p. 292. $1\frac{1}{2}$ columns.
- COST OF HAULAGE BY ELECTRIC MOTORS VS MULES.** Miner's Pocket Book, Lock, p. 117. Tables.
- COST OF ELECTRICAL HAULAGE.** Miner's Pocket Book, Lock, pp. 283, 284, 285 and 294
- COST OF ELECTRIC LOCOMOTIVE HAULAGE AT THE 1870-FOOT LEVEL, SHAMROCK 1 AND 2 COLLIERIES, GERMANY.** E. & M. J., vol. 89, p. 1238. Table.

- COST OF ELECTRIC HAULAGE AT PLEASLEY COLLIERY.** T. F. I. M. E., vol. 12, p. 634.
- COST OF ELECTRIC MOTORS, DYNAMOS AND CABLE.** Miner's Pocket Book, Lock, p. 118. Table
- COST OF ELECTRIC TRACTION** J. W. Soc. E., vol. 1, p. 762 Table
- COST OF ELECTRIC- AND MULE-HAULAGE IN COAL MINES.** T. A. I. M. E., vol. 19, p. 281.
- COST OF ELECTRICITY, MULE AND TAIL-ROPE HAULAGE.** T. A. I. M. E., vol. 18, p. 418.
- COST OF MINE HAULAGE.** E & M J., vol. 74, p. 407.
- COST OF ELECTRIC- VS WIRE-ROPE HAULAGE** T. F. I. M. E., vol. 7, pp 584, 585
- COST OF MINE TROLLEY WIRING.** M. & M., vol. 28, p. 453. Table.
- COMPARATIVE COSTS OF TROLLEY AND STORAGE BATTERY HAULAGE** Min. & Sci. Press, vol. 71, p. 205. Table.
- COST OF COMPRESSED AIR HAULAGE IN A MINE.** Min. & Sci. Press, vol. 84, p. 89. $\frac{1}{2}$ column
- See also **ELECTRIC HAULAGE.**
- COST OF COMPRESSED AIR HAULAGE.** M. & M., vol. 29, p. 518 $\frac{1}{2}$ column.
- COMPARATIVE COSTS OF COMPRESSED AIR, ELECTRICITY AND MULE HAULAGE.** Min. Mag., vol. 12, p. 383.
- COST OF OPERATING COMPRESSED AIR HAULAGE PLANT.** M. & M., vol. 25, p. 569.
- COST OF COMPRESSED AIR HAULAGE.** M. & M., vol. 21, p. 177. 1 column.
- COST OF COMPRESSED AIR MOTORS FOR GATHERING CARS IN MINES** T. A. I. M. E., Albany Meeting, Feb., 1903, p. 4. Table
- ESTIMATED COST OF A COMPRESSED-AIR ROAD IN THE UNITED STATES.** T. A. I. M. E., vol. 19, p. 561.
- See also **COMPRESSED AIR HAULAGE.**
- COST OF TAIL-ROPE HAULAGE.** Miner's Pocket Book, Lock, pp. 293, 294. Tables.
- COST OF INSTALLATION, MAINTENANCE AND OPERATION OF TAIL-ROPE SYSTEM OF HAULAGE** E. & M. J., vol. 74, p. 679.
- COMPARATIVE COSTS OF HAULAGE BY CHAINS AND WIRE ROPE.** E & M. J., vol. 33, p. 278 Table.
- COST OF OPERATING UNDERGROUND ROPE HAULAGE IN THE COAL MINES OF THE RHUR DISTRICT.** Gluckauf, 1900, p. 141.
- COST OF HAULAGE BY GASOLINE MOTORS AND BY MULES.** M. & M., vol. 31, p. 630. Table.
- See also **GASOLINE MOTORS.**
- COMPARATIVE COST OF LOCOMOTIVE AND MULE HAULAGE.** E. & M. J., vol. 6, p. 154. Tables.
- COST OF LOCOMOTIVE HAULAGE.** E. & M. J., vol. 75, p. 331.
- COST OF HAULAGE BY LOCOMOTIVES AND MULES.** Second Geol. Sur. Pa., AC, p. 222 Tables.
- See also **STEAM LOCOMOTIVES.**
- COST OF VERTICAL AND INCLINED EQUIPMENT.** T. I. M. & M., vol. 11, plate 79.
- COST OF OPERATING A COMBINED GRAVITY AND POWER HOIST SYSTEM IN TENNESSEE.** M & M., vol. 19, p. 534.
- WORKING AND MAINTENANCE COSTS, FOR ENGINE PLANE, ENGLAND, 1880-83.** T. N. S. I. M. & M. E., vol. 6, p. 107 Tables
- METHOD OF ASCERTAINING MAINTENANCE COST PER MILE OF ENGINE PLANE PER YEAR** T. N. S. I. M. & M. E., vol. 6, p. 109.
- See also **HAULAGE ON INCLINES.**
- COST OF ENGINE PLANE TRACK, ENGLAND, 1880-'83** T. N. S. I. M. & M. E., vol. 6, p. 107. Table.
- COST OF TRACK LAYING IN AN ENTRY OF GIVEN LENGTH.** M. & M., vol. 19, p. 474. Table.

COST OF WOODEN AND METAL TRACK FOR MINES E. & M. J., vol 75, p. 331.

See also MINE ROADS AND TRACKS.

COST OF CHECK BLOCKS ON MINE HAULAGE TRACKS. T. N. S. I. M. & M. E., vol 8, p. 205 also 206. Table.

COST OF MINE CARS. M. & M., vol 25, p. 458. Table.

HAULAGE COST OF NEW HOUSE TUNNEL, IDAHO SPRINGS, COLORADO. M. & M., vol. 27, p. 73, also p. 74.

COST OF INSTALLATION AND OPERATION AT SEVERAL EUROPEAN TUNNELS Min. & Sci. Press, vol. 48, pp. 322, 323. Tables.

TUNNEL ROYALTY (COMSTOCK). Min. & Sci. Press, vol 62, p. 104. $\frac{3}{4}$ column.

Cost of Hoisting

COST OF HOISTING. E. & M. J., vol. 74, p. 407.

COST OF WINDING AT COLLIERIES. By W. C. Mountain. Min. Mag., vol 13, p. 229 $7\frac{1}{2}$ columns

COST OF HOISTING. The Witwatersrand Goldfields, p. 268. 3 pages.

COST OF HOISTING ORE IN QUEENSLAND T. I. M. E., vol. 21, p. 390 Table.

COST OF HOISTING T. I. M. & M., vol. 11, p. 147. Table.

ECONOMY IN RAISING AND LOWERING MEN IN MINES. Calculations. Min. & Sci. Press, vol. 18, p. 307. $\frac{1}{4}$ column.

ECONOMY IN WINDING ENGINES E. & M. J., vol. 33, p. 132. $\frac{3}{4}$ column.

COMPARATIVE COST OF HOISTING BY THE CAGE-CAR AND TUB SYSTEMS IN TWO WISCONSIN ZINC MINES. Eng.-Cont., vol. 27, p. 105. 4 columns

COST OF HOISTING IN THE WISCONSIN ZINC MINES. E. & M. J., vol. 83, p. 380 $1\frac{1}{2}$ columns.

COST OF HOISTING AT GALENA, KANSAS. Univ. Geol. Sur. of Kans., vol 8, p. 350 1 page

COSTS OF OPERATING HOISTS, JOPLIN DISTRICT, MISSOURI. Min. Mag., vol. 10, p. 263 2 columns

COST OF HOISTING ON THE RAND. Witwatersrand Goldfields, pp. 268 and 298. Tables.

COST OF HOISTING AT PORTLAND MINE, COLORADO. T. A. I. M. E., vol. 37, p. 97. Table

COST OF HOISTING AT THE PORTLAND MINE. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, pp. 1305, 1326, 1327. Tables.

COST OF OPERATING A COMBINED GRAVITY AND POWER HOIST SYSTEM IN TENNESSEE. M. & M., vol. 19, p. 534.

COST OF VERTICAL AND INCLINED EQUIPMENT. T. I. M. & M., vol. 11, plate 79.

See also METHODS OF HOISTING.

COST OF ROPE PER TON ORE TREATED, WESTERN AUSTRALIA Gold Min. & Mill, W. Aus., p. 456 Table.

COST OF DIFFERENT KINDS OF ROPE PER TON HOISTED. T. I. M. & M., vol 11, p. 172. 1 page.

COST OF LANG LAY ROPES T. I. M. E., vol. 30, p. 568. Table.

RELATIVE ECONOMY (COST) OF ALOR AND WIRE ROPES FOR MINES E. & M. J., vol. 18, p. 100. $\frac{1}{2}$ column.

COST OF ROPE PER TON HOISTED T. I. M. & M., vol. 11, p. 291.

See also ROPES, CHAINS, COUPLINGS, ETC., and KINDS OF WIRE ROPE.

COST OF ELECTRIC HOISTING IN THE ANTHRACITE FIELDS. E. & M. J., vol 84, p. 886

COST OF ELECTRIC WINDING ON THE CONTINENT. T. I. M. E., vol 31, p. 281. Table

COST OF ELECTRICAL WINDING. T. I. M. E., vol 31, pp. 333, 334, 335, 336, 337, 338, 339, 341, 342, 343, 344, 345, 346, 347.

COST OF INSTALLATION AND EXPENSE OF OPERATING ELECTRICAL HOISTS. E. & M. J., vol. 83, p. 898. 5 columns.

See also ELECTRIC HOISTING.

COST OF AIR LIFT (HOIST) Min. & Sci. Press, vol. 73, p. 30 Table.

COST OF PNEUMATIC SYSTEM OF HOISTING T. A. I. M. E., vol. 19, p. 120.

See also PNEUMATIC HOISTING.

Cost of Hydraulic Mining

COST OF HYDRAULIC MINING Sch. Mines Quart., vol. 3, p. 89. Table.

COST OF HYDRAULIC SLUICING IN AUSTRALIA T. A. I. M. E., vol. 12, pp. 38, 39, 40 and 41.

COST OF TIN SLUICING IN TASMANIA M & M., vol. 31, p. 314. Table.

METHODS AND COSTS OF GRAVEL AND PLACER MINING IN ALASKA. By C. W. Purington. U. S. G. S., Bull. 259, p. 32. 14½ pages.

COST OF WORKING FROZEN GRAVEL IN ALASKA T. I. M. & M., vol. 9, p. 186. ½ page.

AVERAGE COST OF MINING ON THE YUKON. J. C. M. I., vol. 11, p. 549. ½ page.

COST OF WORKING AURIFEROUS GRAVEL IN ALASKA AND THE KLONDIKE. Min. Mag., Jan., 1905, pp. 17, 20.

GRAVEL-MINING COSTS IN ALASKA AND NORTHWEST CANADA. By C. W. Purington. E. & M. J., Feb. 9, 1905, p. 269. 5½ columns.

COST OF HYDRAULIC MINING IN CANADA. Min. & Sci. Press, vol. 42, p. 136. ¾ column.

COST OF MINING AND MILLING ALLUVIAL DEPOSITS, BRITISH COLUMBIA. Min. & Sci. Press, vol. 87, p. 305.

COST OF WORKING ALLUVIAL DEPOSITS ON THE RAND. T. N. S. I. M. & M. E., vol. 10, p. 145. Table.

COST AND PROFIT OF ALLUVIAL MINING IN OTAGO, NEW ZEALAND. T. A. I. M. E., vol. 21, pp. 451, 468, 469.

See also HYDRAULIC MINING.

Cost of Labor

MINER'S WAGES Min. & Sci. Press, vol. 33, p. 410, ¼ column; vol. 34, p. 88, ¾ column.

REDUCTION OF MINER'S WAGES. Min. & Sci. Press, vol. 34, p. 118. 1½ columns.

THE MINER'S WAGES QUESTION Min. & Sci. Press, vol. 34, p. 136, ¾ column; p. 152, ½ column.

FORCE ACCOUNT COSTS. Min. & Sci. Press, vol. 101, p. 638. 1½ columns. Tables.

METHODS OF PAYING MINER'S WAGES. By J. Daniels. E. & M. J., vol. 84, p. 358. 3½ columns.

LABOR COST FOR A CROSSING AND INCLINE. T. N. S. I. M. & M. E., vol. 6, p. 198. Table.

LABOR COST FOR AN INCLINE. T. N. S. I. M. & M. E., vol. 6, p. 196. Table.

"MINERS' WAGES IN MEXICO." Min. & Sci. Press, vol. 85, p. 73. 1½ columns.

INCREASED COST OF LABOR AND MATERIAL. E. & M. J., vol. 82, p. 627. ½ column.

THE HOMESTEAD COMPROMISE WAGE SCALE, AND COMPUTED WAGE EARNINGS. E. & M. J., vol. 48, p. 48. 1½ columns.

MINER'S WAGES AND LOW GRADE ORES. Min. & Sci. Press, vol. 42, p. 134. 2½ columns.

LABOR AND TONNAGE CHART AS AIDS IN REDUCING COSTS. By C. T. Rice. E. & M. J., vol. 90, p. 754. 5 columns. D.

COST OF LABOR ON THE RAND. By E. P. Rathbone. Min. & Sci. Press, vol. 94, p. 466. 2 columns.

- COST OF LABOR ON THE RAND. Gold Mines of the Rand, p. 252. 6 pages
- COST OF LABOR ON THE RAND. P. C. M. & M Soc. S. A., vol. 9, p. 225 3 columns.
- LABOR COSTS ON THE RAND. Witwatersrand Goldfields, p. 449. Table.
- LABOR COST IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 299. 1 column
- LABOR COSTS AT THE KIMBERLEY MINES. T. N. S. I. M. & M. E., vol. 10, p. 105.
- LABOR COST ON THE RAND. T. N. S. I. M. & M. E., vol. 10, p. 137.
- SCHEDULE OF PRICES OF LABOR PER SHIFT, THE RAND MINES. T. A. I. M. E., vol. 39, p. 429 Table
- COST OF LABOR, TIMBER AND HAULAGE AT THE TURKEY HEAVEN GOLD DISTRICT, ALABAMA. E. & M. J., vol. 55, p. 486.
- LABOR COSTS IN THE ALABAMA AND GEORGIA GOLDFIELDS. T. A. I. M. E., vol. 26, p. 472. Table.
- LABOR COST IN TUNNELING IN THE ALABAMA GOLDFIELDS. E. & M. J., vol. 55, p. 486.
- LABOR COST AT BRILLIANT COAL MINES, ALABAMA (1906). T. A. I. M. E., vol. 37, p. 490. 1 page.
- LABOR COST ON THE YUKON IN 1896. U. S. G. S., 18th Ann. Rept., pt. 3, p. 387.
- COST OF LABOR AT BISBEE COPPER MINES, ARIZONA. M. & M., vol. 27, p. 293. $\frac{1}{4}$ column
- LABOR COST IN THE DEEP ALLUVIAL WORKINGS, AUSTRALIA. T. I. M. & M., vol. 7, p. 114. Table.
- COST OF LABOR IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 455, 457, 460, 461, 464, 465, 606 Tables.
- COST OF LABOR PER TON ORE AT THE GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 616. Table.
- LABOR COST AND DISTRIBUTION IN MILLING, AUSTRALIA. P. C. M. & M Soc. S. A., vol. 8, p. 239 1 column.
- LABOR COSTS IN WESTERN AUSTRALIA. M. & M., vol. 25, p. 42 Table.
- COAL MINERS' WAGES IN BOHEMIA. Min. & Sci. Press, vol. 87, p. 154. Table.
- WAGE SCALE AT COBALT. M. & M., vol. 27, p. 488.
- WAGE SCALE ROSSLAND, BRITISH COLUMBIA. Min. & Sci. Press, vol. 90, p. 140. Table
- LABOR COSTS IN MINES OF NOVA SCOTIA. Min. & Sci. Press, vol. 91, p. 290.
- LABOR COST IN A CALIFORNIA GOLD MINE. Ore Dressing, Richards, vol. 2, p. 1131. Table.
- WORK AND WAGES IN CALIFORNIA. Min. & Sci. Press, vol. 30, p. 114. $5\frac{1}{2}$ columns.
- CALIFORNIA AND NEVADA MINING WAGES. E. & M. J., vol. 83, p. 846. $\frac{1}{4}$ column
- LABOR COST AT OROVILLE, CALIFORNIA. E. & M. J., vol. 78, p. 909 Table.
- LABOR COST IN NOVA SCOTIA. Min. & Sci. Press, vol. 91, p. 290.
- LABOR COSTS AT ALMADEN. Min. & Sci. Press, vol. 37, p. 392. Tables.
- LABOR COSTS AT CAMP BIRD MINE. Sch. Mines Quart., vol. 24, p. 64. Table.
- LABOR COST AT CAMP BIRD MINE, OURAY, COLORADO. T. A. I. M. E., vol. 33, p. 526. Table.
- COMPARATIVE RATES FOR LABOR AT THE MINES OF BOULDER AND CRIPPLE CREEK, COLORADO. T. I. M. E., vol. 19, p. 334.
- LABOR COST AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb. 1906, pp. 1326, 1327. Tables.
- FORMER RATES OF WAGES IN ENGLAND. Coll. Working and Management, p. 34. 10 pages. Table.

- PRESENT WAGES IN ENGLISH COAL MINES** Coll. Working and Management, p. 43.
- LABOR COST AT WARDNER, IDAHO.** Rept. Zinc Comm., Canada, p. 43.
- LABOR COSTS IN A STAMP MILL IN IDAHO** Ore Dressing, Richards, vol. 2, p. 112 Table.
- LABOR COST IN NORTHERN IDAHO.** Ore Dressing, Richards, vol. 2, p. 1130. Table.
- LABOR COSTS IN THE MALAY PENINSULA TIN MINES** Tin Deposits of the World, pp. 59 and 64. Table.
- LABOR COST IN TIN MINES OF SPAIN** Tin Deposits of the World, p. 151 Table.
- LABOR COSTS IN DRESSING TIN ORES AT MOUNT BISCHOFF.** Tin Deposits of the World, p. 172.
- WAGE SCALE IN THE JOPLIN REGION** M. & M., vol. 28, p. 156. Table.
- LABOR COSTS, MISSOURI LEAD AND ZINC MINES.** Ore Dressing, Richards, vol. 2, p. 1129. Table.
- LABOR COSTS IN THE LEAD AND ZINC MINES OF THE JOPLIN DISTRICT.** Univ. Geol. Sur of Kans., vol. 8, pp. 350, 377, etc. Table.
- LABOR COSTS IN THE JOPLIN DISTRICT, MISSOURI** E. & M. J., vol. 84, p. 1119. $\frac{1}{2}$ column.
- COST OF LAKE SUPERIOR AND MONTANA COPPER.** By J. R. Finlay E. & M. J., vol. 85, p. 856. 13 $\frac{1}{2}$ columns.
- LABOR COSTS AT THE BALTIC MILL, LAKE SUPERIOR.** T. I. M. & M., vol. 14, p. 193. Table.
- WAGE SCALE IN MONTANA COAL MINES.** M. & M., vol. 27, p. 484. Table.
- LABOR COSTS IN COAL MINES OF MONTANA, 1908.** E. & M. J., vol. 85, p. 1058. 1 column. Table.
- COST OF MINE LABOR, BUTTE, MONTANA.** M. & M., vol. 21, p. 158. Table.
- COST OF MINE LABOR, ROSSLAND, BRITISH COLUMBIA** M. & M., vol. 21, p. 367. Table.
- COST OF HAULAGE SYSTEM EMPLOYED AT THE COTTONWOOD MINE, MONTANA.** M. & M., vol. 19, p. 276. Table.
- LABOR COST AT THE NEW SODDY COAL COMPANY, TENNESSEE HAULAGE SYSTEM.** M. & M., vol. 19, pp. 534, 535.
- LABOR COST, KELLY, NEW MEXICO.** M. & M., vol. 27, p. 52.
- COST OF LABOR IN THE NEW YORK HEMATITE MINES.** E. & M. J., vol. 82, p. 555. $\frac{1}{2}$ column.
- COST OF LABOR AND SUPPLIES IN DRIVING DRIFT AT GOLDFIELD.** E. & M. J., vol. 90, p. 1246. 1 column. Table.
- LABOR COSTS AT THE COMBINATION MINE.** Min. & Sci. Press, vol. 95, p. 437. Table.
- WAGE SCALE AT TONAPAH, 1906.** E. & M. J., vol. 82, p. 247. $\frac{1}{2}$ column.
- LABOR COSTS IN EASTERN OREGON.** M. & M., vol. 19, p. 15.
- HOW COLLIERIES WERE PAID BY OUR GREAT-GRAND-FATHERS.** Coll. Eng., vol. 8, p. 68. $\frac{1}{2}$ column.
- COST OF HOUSE RENT TO MINERS IN THE ANTHRACITE COAL FIELDS OF PENNSYLVANIA: Basis of Fixing Charge.** The Anthracite Coal Industry, Roberts, p. 130. 4 pages.
- LABOR COSTS: Wages in the Anthracite Coal Fields.** The Anthracite Coal Industry, Roberts, p. 108. 20 pages.
- THE COST OF LIVING: Anthracite Coal Miners.** E. & M. J., vol. 74, p. 709.
- LABOR COSTS IN PENNSYLVANIA MINES.** Rept. Insp. Mines, Pa., 1878, p. 232, 253, 254, 255, 256, 257; 1879, pp. 324, 325 and 1880, pp. 248, 249. Tables.
- LABOR COSTS IN THE IRON MINES OF SCANDINAVIA.** T. I. M. & M., vol. 13, p. 500. Table.

COST: Wages Earned Per Day at Cabezas del Pasto Mine, Spain. T. A. I. M. E., vol. 21, p. 101

LABOR COST PER TON COAL, MONTANA. M. & M., vol. 19, p. 276. Table

LABOR COSTS AT THE REDJANG LEBONG MINE, SUMATRA. T. I. M. & M., vol. 16, p. 46. Table.

WAGE SCALE AT BINGHAM, UTAH. M. & M., vol. 28, p. 108.

WAGE SCALE AT THE DALY-JUDGE MINE, UTAH. M. & M., vol. 28, p. 35. Table.

LABOR COSTS IN VENEZUELA. T. I. M. & M., vol. 9, p. 108. Table.

LABOR COSTS IN WISCONSIN ZINC FIELDS. E. & M. J., vol. 81, p. 1235.

COST OF FEEDING COOLIES AND KAFFIRS. T. A. I. M. E., vol. 39, p. 569. 3 pages.

THE COST OF LIVING AT JOHANNESBURG. By T. L. Carter. E. & M. J., vol. 75, p. 895. 1½ columns.

WAGES OF MINERS ON THE CONTINENT. E. & M. J., vol. 51, p. 445.

THE COST OF LIVING. Min. & Sci. Press, vol. 93, p. 333. ½ column.

LABOR COSTS OF THE MOUNT WOOD AND TOP MILL TUNNELS. J. W. Soc. E., vol. 2, pp. 60, 61. Tables.

COST OF LABOR IN DRIFT MINING. Min. & Sci. Press, vol. 68, p. 165. ½ column.

See also **LABOR IN MINES, AND MINER'S WAGES.**

Cost of Lighting

COST OF ILLUMINATION IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 185. 1 page.

COST OF CANDLES, WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 454, 456, 461, 462. Table.

COST OF LIGHTING BY CANDLES. Miner's Pocket Book, Lock, p. 344. Table.

COST OF CANDLES ON THE RAND, 1902. Witwatersrand Goldfields, p. 458. Table.

PROPER ALLOWANCE OF CANDLES PER SHIFT. Min. & Sci. Press, vol. 85, p. 202.

COST OF CANDLES. Min. & Sci. Press, vol. 85, pp. 264 and 292

See also **CANDLES, ETC.**

COST OF LIGHTING BY ELECTRICITY. Miner's Pocket Book, Lock, p. 342. 2 pages.

COMPARATIVE COSTS OF ILLUMINANTS: Electricity, Gas and Paraffin. T. N. S. I. M. & M. E., vol. 10, p. 32. Table

COST OF USE OF SUSSMANN ELECTRIC MINER'S LAMP. T. I. M. E., vol. 21, p. 193. Table.

COST OF MAINTAINING EACH ARC LAMP IN NEW YORK CITY HAS BEEN FIGURED TO BE \$168.94; OF EACH INCANDESCENT LAMP \$29.00 PER YEAR. E. & M. J., vol. 79, p. 489.

COST OF INSTALLATION, OPERATION, AND MAINTENANCE OF AN ELECTRIC LIGHTING PLANT FOR A MINE. Coll. Engr., vol. 9, p. 162. Tables.

COST OF LIGHTING A FACTORY WITH INCANDESCENT LAMPS, COMPARED WITH GAS. E. & M. J., vol. 38, p. 380.

See also **ELECTRICITY FOR MINE LIGHTING**

COST OF OPERATING ACETYLENE MINE LAMPS. E. & M. J., vol. 72, p. 466.

COST OF ACETYLENE LIGHT FOR MINES. E. & M. J., vol. 83, p. 95.

See also **ACETYLENE GAS FOR MINES.**

Cost of Maintenance and Depreciation

DEPRECIATION OF MINING PLANTS. Min. & Sci. Press, vol. 89, p. 187. 1½ columns.

See also **AMORTIZATION AND DEPRECIATION.**

Cost of Metallurgical Treatment

COST OF METALLURGICAL WORKS. By W. R. Ingalls. E. & M. J., vol. 90, p. 14. 3 columns.

THE NEW SMELTING RATES IN COLORADO. E. & M. J., vol. 64, p. 696. 1 column.

SMELTER RATES FOR WESTERN ORES: Gold, Silver, Copper and Lead. M. & M., vol. 27, p. 220. 1 column.

SMELTING RATES CLEAR CREEK VALLEY MINES, COLORADO, 1905. Min. & Sci. Press, vol. 91, p. 13. Tables.

SMELTING RATES IN NEVADA. E. & M. J., vol. 82, p. 1079. $\frac{1}{2}$ column.

SMELTING RATES ON ORE FROM EUREKA, NEVADA. E. & M. J., vol. 85, p. 1143. $\frac{1}{2}$ column.

SMELTING RATES IN MEXICO. By T. Chase. E. & M. J., vol. 89, p. 270. $1\frac{1}{2}$ columns.

SMELTING CHARGES. Min. & Sci. Press, vol. 84, p. 331. $1\frac{1}{2}$ columns.

SMELTER CHARGES AND MINE PROFITS. Min. & Sci. Press, vol. 84, p. 344, 2 columns; vol. 85, p. 87, 1 column.

SINGAPORE SMELTING-CHARGES. T. A. I. M. E., vol. 20, p. 80.

PAYING BY "UNIT" SMELTER PRACTICE. Min. & Sci. Press, vol. 82, p. 259.

SMELTER METHODS IN COLORADO: Charges. Min. & Sci. Press, vol. 81, pp. 9 and 463.

SMELTER CHARGE HANDLING IN THE SOUTHWEST By R. B. Brinsmade. M. & M., vol. 27, p. 272. 6 columns.

COST OF SMELTING SILVER ORE PER TON IN MEXICO. T. I. M. & M., vol. 8, p. 277.

COST OF THE "DIEHL" PROCESS. T. I. M. & M., vol. 12, pp. 13, 15, 17, 20, 22, 23.

THE RIECKEN PROCESS IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 386. 5 pages.

COST OF THE RIECKEN PROCESS IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 390. Tables

See also METALLURGICAL PROCESSES, THEORY, ETC.

COST OF PLANT AND TREATMENT BY THE GREENAWALT ELECTROLYTIC PROCESS. E. & M. J., vol. 90, p. 1066. Tables.

See also ELECTRO-METALLURGY.

COST OF TREATMENT OF SULPHIDE ORE BY PHOENIX PROCESS. T. I. M. & M., vol. 9, p. 396. 2 pages.

RELATIVE COST OF BRIMSTONE AND PYRITES FOR ACID MAKING. E. & M. J., vol. 37, p. 314. 1 column.

THE COST OF SMELTING COPPER ORE. By G. F. Beardsley. E. & M. J., vol. 82, p. 397. $2\frac{1}{2}$ columns.

COST OF TREATMENT OF LOW-GRADE COPPER ORES. T. I. M. E., vol. 26, p. 43. Table.

APPROXIMATE COST OF PRODUCING COPPER FROM ONE AND TWO FURNACES, IN ARIZONA. Sch. Mines Quart., vol. 6, p. 373. Tables.

CALCULATIONS OF COST OF REFINING COPPER ELECTROLYTICALLY. Min. & Sci. Press, vol. 87, p. 254. $\frac{1}{2}$ column.

COST OF ELECTROLYTIC COPPER REFINING. E. & M. J., vol. 76, p. 740. Table.

COST OF COPPER, LAKE SUPERIOR. E. & M. J., vol. 43, p. 307. 2 columns.

COST PER TON OF COPPER MATTE CONVERTING. E. & M. J., vol. 90, p. 464. Table.

COST AND PROFITS IN PYRITIC SMELTING OF LOW-GRADE COPPER ORES. By F. H. Prentiss. Min. & Sci. Press, vol. 84, p. 255, 2 columns; p. 268, $3\frac{1}{2}$ columns; p. 282, $4\frac{1}{2}$ columns, I.; p. 295, $3\frac{1}{2}$ columns, I.; p. 308, $3\frac{1}{2}$ columns, I.; p. 323, $4\frac{1}{2}$ columns, I.; p. 333, $2\frac{1}{2}$ columns, I.

COST OF REFINING PIG COPPER. T. A. I. M. E., vol. 10, p. 53.

COST OF PRODUCTION OF FINE COPPER. E. & M. J., vol. 51, p. 347. $\frac{1}{2}$ column.

- COST OF COPPER IN LAKE SUPERIOR E. & M. J., vol 38, p 374. 2 columns.
- See also REFINING OF COPPER.
- COST OF SMELTING COPPER ORES. T. A. I. M. E., vol 15, p. 65
- COSTS OF SMELTING ORE PER TON, CANANEA E. & M J, vol 89, p 315 Table.
- COSTS OF LAKE SUPERIOR SMELTING. By L. S. Austin. Min & Sci Press, vol 98, p. 392 $3\frac{1}{2}$ columns. Tables
- COST OF REFINING LAKE SUPERIOR COPPER E. & M. J., vol 74, p. 370 $\frac{1}{2}$ column
- COST OF COPPER SMELTING IN NORWAY E. & M. J, vol. 74, p 377.
- See also METALLURGY OF COPPER
- COST OF LEACHING COPPER ORES IN THE URALS. T. I. M. & M., vol 19, p 230, Tables; pp 259 and 260, Tables.
- COMPARATIVE COSTS OF SMELTING AND CYANIDING ORES IN WESTERN AUSTRALIA Min Mag, vol. 11, p 449
- SMELTING COST AT MINE LE ROI, BRITISH COLUMBIA. E & M. J., vol. 88, p 104 $1\frac{1}{2}$ columns Table
- COST OF TREATING THE DRY ORES OF THE SLOCAN. J C M. I., vol. 7, pp. 204, 205, 206
- COST OF TREATMENT AT KALGOORLIE: Roasting and Filterpress Work E & M. J, vol 76, p. 352 Table
- COST OF PRECIPITATION OF METALS T A I M. E., vol 20, pp. 33, 34, 35.
- COST OF PRECIPITATION AND MELTING, MINAS DEL TAJO, CYANIDE PLANT, SINALOA. E & M J, vol. 89, p 569 Table.
- See also CYANIDING GOLD, ETC.
- COST OF CHEMICALS AND TREATMENT BY CHLORINATION IN COLORADO E. & M J, vol. 78, p. 670. Table
- COST OF CHLORINE SMELTING. Min & Sci. Press, vol. 87, p. 352
- See also THE CHLORINATION PROCESS.
- COST OF STEEL MAKING IN ALABAMA. E. & M J, vol 46, pp 84 and 125; vol 47, p. 214.
- COST OF PRODUCING ONE GROSS TON OF COKE PIG-IRON. T. A. I M E, vol. 16, p. 200.
- COST OF PRODUCING PIG IRON IN THE UNITED STATES By W. B. Phillips E. & M J, vol. 72, p. 267. 4 pages
- COST OF MAKING CHARCOAL IRON IN TEXAS P. E Soc W. Pa, vol 18, p. 65 Table
- COST OF PRODUCING ONE GROSS TON OF ANTHRACITE PIG-IRON. T. A. I. M. E., vol 16, p. 200.
- COST OF PRODUCING ONE GROSS TON OF CHARCOAL PIG-IRON. T A I. M E, vol 16, p. 199.
- APPROXIMATE COST OF PIG-IRON PRODUCED AT DULUTH, CLEVELAND AND CHICAGO. T. A I M. E, vol 16, p. 201
- CLASSES AND PRICES OF LAKE IRON ORES. E. & M. J., vol. 75, p 373. $\frac{1}{2}$ column
- COST OF PIG IRON MADE FROM LAKE SUPERIOR ORES. By J. R Finlay E. & M. J., vol. 87, p 739 $17\frac{1}{2}$ columns.
- COST OF ELECTRIC SMELTING OF IRON ORES. E & M. J, vol 82, p 25. Table.
- See also METALLURGY OF IRON AND STEEL.
- COST OF EXTRACTION OF MERCURY AT ALMADEN. Min. & Sci Press, vol 38, p. 38 $1\frac{1}{2}$ columns
- COST OF TREATMENT OF QUICKSILVER IN THE GUADALCAZAR DISTRICT, MEXICO. T I M & M., vol. 4, p 143.
- See also METALLURGY OF QUICKSILVER.
- COST OF SILVER SMELTING IN MEXICO. Min & Sci. Press, vol. 81, p 285. Table.
- COST OF SMELTING AT SIERRA MOJADA, MEXICO. T A. I. M. E, vol 15, pp. 559 and 562.

See also METALLURGY OF GOLD AND SILVER.

COST OF ZINC SMELTING. E. & M. J., vol. 83, p. 1248.

COST OF SMELTING ZINC ORES. Rept. Zinc. Comm., Canada, p. 28. 5 pages.

COST OF ELECTROLYTIC PLANT AND ELECTROLYSIS IN HOFFNER ZINC PROCESS. E. & M. J., vol. 75, p. 752.

COSTS IN ZINC SMELTING. M. & M., vol. 19, p. 104. Tables.

COST OF PLANT AND OPERATION IN THE HOFFNER ZINC PROCESS Electrolytic E. & M. J., vol. 75, p. 751

COST OF SMELTING AT JOPLIN, MISSOURI E. & M. J., vol. 84, p. 863. Tables.

See also METALLURGY OF ZINC.

COST OF LEAD PRODUCTION IN THE SCOTCH HEARTH. E. & M. J., vol. 80, p. 11

COST OF LEAD SMELTING IN THE UNITED STATES E. & M. J., vol. 74, p. 208. 1 column

COST OF LEAD SMELTING BY THE HUNTINGTON-HEBERLEIN PROCESS. E. & M. J., vol. 80, pp. 535, 537, 538 Table

COST OF ROASTING ARGENTIFEROUS ZINCBLLENDE AND GALENA. E. & M. J., vol. 47, p. 191. Table

THE COST OF SILVER-LEAD SMELTING. By W. R. Ingalls. E. & M. J., vol. 86, p. 315. 19 columns.

THE COST OF SILVER-LEAD SMELTING. E. & M. J., vol. 86, p. 585. 5 columns.

SMELTING RATES ON SILVER-LEAD ORES Rept. Zinc. Comm., Canada, p. 72. 2 pages.

COST OF RUNNING OR OPERATING BARTLETT BAG-PROCESS FOR COLLECTING LEAD-FUMES. T. A. I. M. E., vol. 18, p. 698.

See also METALLURGY OF LEAD

COST OF EXTRACTION OF SULPHUR E. & M. J., vol. 37, p. 235 Table.

COST OF EXTRACTION OF SULPHUR. Min. & Sci. Press, vol. 48, p. 350. Table.

COST OF SMELTING SILICIOUS ORES, MEXICO. Min. & Sci. Press, vol. 83, p. 5. Table.

PROFITS OF SMELTING IN UTAH. Min. & Sci. Press, vol. 35, p. 22. 1 column

EUREKA AND UTAH COMPARED. Min. & Sci. Press, vol. 35, p. 66. $\frac{1}{2}$ column.

COST OF SMELTING THE SILICIOUS ORES OF THE BLACK HILLS. E. & M. J., vol. 69, p. 228

SMELTER CHARGES AT DENVER AND SALT LAKE CITY. M. & M., vol. 22, p. 204. Table.

COST OF SMELTING IN REVERBERATORY FURNACES. Min. & Sci. Press, vol. 89, p. 36.

COST OF DISPOSAL OF BULLION Gold Min. & Mill., W. Aus., p. 466. 4 pages

COST OF REFINING AND SHIPPING CRUDE BULLION. Min. & Sci. Press, vol. 36, p. 93. $\frac{1}{2}$ column

See also REFINING GOLD AND SILVER, REFINING OF COPPER, and METALLURGY OF LEAD

COST OF CALCINING WITH THE MERTON FURNACE, AT KALGOORLIE. E. & M. J., vol. 76, p. 776.

THE COST OF ROASTING ORES. E. & M. J., vol. 56, p. 666. 2 columns.

COST OF ROASTING ORE. T. A. I. M. E., vol. 10, p. 34.

COST OF ROASTING PER TON WITH THE BROWN ROASTER. E. & M. J., vol. 62, p. 9.

COST OF ROASTING AND HANDLING ORE. T. A. I. M. E., vol. 19, p. 294.

COST OF ROASTING CONCENTRATES. T. A. I. M. E., vol. 17, p. 318.

74 COST OF MINING, MILLING, METALLURGY, ETC.

COST OF ROASTING ORE IN COLORADO.
E. & M. J., vol 78, p. 669 Table.

See also **ROASTING ORES, ETC.**

Cost of Mine Examination

THE VALUE OF ADVICE: Fees Min.
& Sci Press, vol 88, p 326 $\frac{3}{4}$ col-
umn.

THE COST OF TESTING A MINE Min.
& Sci Press, vol 81, p 125 $\frac{1}{4}$ col-
umn.

See also **VALUE OF MINES, ETC.**

Cost of Mine and Mill Construction

COST OF CRIB CONSTRUCTION: Brief
Method for Preparing Estimates.
By G. A. M. Liljencrantz. J. W.
Soc. E., vol. 4, p. 361 10 pages.

COST OF SHOP DRAWINGS. M & M,
Dec., 1901, p. 197. $\frac{1}{4}$ column.

COST OF CONSTRUCTION MADE OF
HOLLOW CONCRETE BLOCKS. E &
M. J., vol 80, p 50

COST OF CONCRETE IN BUILDING CON-
STRUCTION. E. & M. J., vol 76,
p. 623

COST OF CONSTRUCTING A LARGE
SHOP BUILDING WITH REINFORCED
CONCRETE WALLS AND STEEL ROOF
TRUSSES Eng.-Cont, vol. 27, p.
88. 7 columns. I.

COST OF MILL CONSTRUCTION IN THE
COEUR D'ALENE MILLS. E. & M J,
vol. 88, p 1206. $\frac{1}{4}$ column.

COST OF WOODEN SECTION AND TOOL
HOUSES. R. R Construction, Webb,
p. 400 Table.

COST OF ERECTING BUILDINGS PER
TON. E. & M. J, vol. 81, pp. 140
and 313. 2 columns.

COST OF BLACKSMITH SHOP AND TOOLS,
COMPLETE. M & M., vol. 25, p.
458. Table

COST OF MINING PLANT OF 2200 TONS
CAPACITY. T. I. M. & M., vol. 7,
p. 147. Table.

COST OF CYANIDE PLANT AND EREC-
TION T. I. M. & M., vol. 7, p. 148.
Table

COST OF MILL CONSTRUCTION IN
RHODESIA Min. Mag., vol. 13, p.
11. Tables.

DETAILED COST OF MILL CONSTRU-
CTION Ore Dressing, Richards, vol.
2, p 1125. Table.

COST OF CONCRETE VS. BRICK BUILD-
INGS. E & M. J., vol. 80, p 50.

COST OF MILL BUILDINGS Mill Build-
ing Construction, p 15. Table.

COST OF MILL ERECTION IN WISCONSIN.
E & M. J., vol 82, p. 152. Table.

COST OF GOLD-MILL CONSTRUCTION.
T. A I M. E, vol 10, p. 99.

See also **MILL BUILDING, ETC.**

COST OF CORRUGATED IRON ROOFING.
Mill Building Construction, p. 25.
Table.

COST OF DIFFERENT KINDS OF ROOF
COVERINGS Mill Building Con-
struction, p 30

COST OF ROOF COVERINGS E & M.
J, vol. 76, pp. 356, 357. Tables.

COST OF TIPPLE, COMPLETE M. & M.,
vol 25, p. 458 Table.

COST OF TIPPLE AND HEAD FRAMES. E.
& M J., vol 74, p. 407.

COAL TIPPLES: Design and Cost, with
Bill of Materials M & M, Oct.,
1901, p. 139

APPROXIMATE COST OF HEAD FRAMES
AND TIPPLES E & M J, July 14,
1904, p. 64 Table

COST OF HEAD-FRAMES AND TIPPLES.
E & M. J, vol 79, p. 766

See also **TIPPLES, ETC**

COST OF STEEL HEAD-FRAME AND
BINS AT GWIN MINE Min. & Sci.
Press, vol. 88, p 5 $\frac{1}{4}$ column.

See also **HEADFRAMES, ETC.**

COST OF BITUMINOUS COAL BREAKER
AND COST OF OPERATIONS. T. A.
I. M. E, vol. 35, p. 39. Tables.

COST OF THE PACIFIC COAL COM-
PANY'S BREAKER AT ALBERTA, CAN-

- ADA. E. & M. J., vol. 83, p. 861. Table.
- COST OF LARGE COAL BREAKER IN CANADA. E. & M. J., vol. 82, p. 1023.
- COST OF BREAKER CONSTRUCTION AND OPERATION. E. & M. J., Apr. 7, 1904.
- See also TIPPLES, ETC.
- COST OF GOLD DREDGE CONSTRUCTION. Cal. Miners' Assoc., Ann., 1906, p. 109. 1 page
- COST OF ERECTING CONCRETE MORTAR BLOCKS T. I. M. & M., vol. 18, p. 35. Table.
- COST OF CONCRETE BLOCK MOULDING. Eng.-Cont., vol. 27, p. 99. Table.
- COST OF CONCRETE BLOCK LAYING. Eng.-Cont., vol. 27, p. 99.
- COST OF MIXING AND PLACING CONCRETE. J. W. Soc. E., vol. 2, p. 346. Table.
- COST OF MINE EQUIPMENT. Min. & Sci. Press, vol. 90, p. 351. 1 column.
- COST OF PORTLAND CEMENT PER BARREL. U. S. G. S., Bull. 315, p. 244. Table.
- COST OF MOULDING CONCRETE CULVERT PIPE. Eng.-Cont., vol. 27, p. 68. Table.
- COST OF THE CONCRETE FOUNDATIONS OF THE GOLDFIELD CONSOLIDATED MILL. E. & M. J., vol. 87, p. 1175. 1 column.
- COST OF CONCRETE STAMP FOUNDATIONS. Min. & Sci. Press, vol. 94, p. 632.
- See also FOUNDATIONS FOR BUILDINGS, ETC.
- COST OF BUILDING A CONCRETE TANK. Min. & Sci. Press, vol. 92, p. 146. Table.
- See also TANK FOR MINE PURPOSES.
- COST OF CONSTRUCTING SHAFT ORE-BINS IN WEST AUSTRALIA. Min. & Sci. Press, vol. 90, p. 170. Table.
- See also ORE BINS, ETC.
- COST OF LINING THE LOS ANGELES TUNNEL. Concrete Work. Min. & Sci. Press, vol. 100, p. 682. 1 column.
- See also TUNNEL SUPPORT.
- COST OF ERECTING A 30-STAMP BATTERY. E. & M. J., vol. 37, p. 461. Tables.
- COST OF ERECTING TWO-SETS OF KROM 26-INCH ROLLS. E. & M. J., vol. 37, p. 461.
- COST OF ERECTING A 30-STAMP BATTERY. Min. & Sci. Press, vol. 51, p. 86. $\frac{1}{2}$ column.
- See also STAMP MILL PRACTICE.
- COST OF CONCRETE MINE BARNs IN THE ANTHRACITE FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, p. 35. Tables
- APPROXIMATE COST OF COLLIERY STABLE. E. & M. J., vol. 81, p. 745. Table.
- COST OF TIMBER AT ALABAMA GOLD MINES. E. & M. J., vol. 55, p. 486.
- COST OF SUPPLIES IN WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., pp. 453, 454, 456, 457, 460, 462, 463. Tables.
- COST OF MATERIAL IN DRIFT MINING. Min. & Sci. Press, vol. 68, p. 165. $\frac{1}{2}$ column.
- COST OF SUPPLIES AND MATERIALS FOR MINES AND QUARRIES OF THE UNITED STATES. Rept. Census Office, Mines and Quarries, 1902, p. 114
- See also QUARRYING METHODS.
- COST OF MATERIALS USED IN THE CONSTRUCTION OF FLUMES, PIPE LINES, CULVERTS, ETC. Notes on the Water Supply in New Countries, pp. 34 and 35. Table.
- See also COST OF FLUME CONSTRUCTION
- COST OF REPAIRS FOR WOOD VS. IRON COAL CARS. E. & M. J., vol. 83, p. 626
- See also MINE CARS, ETC.
- COST OF HAND VS. PNEUMATIC (HAMMER) RIVETING. Am. Engr. & R. R. Jour., vol. 74, p. 386. Table.

COST OF RIVETING STEEL VATS IN THE FIELD Gold Min & Mill., W Aus., p. 254

COST OF RIVETING E & M J., vol. 80, p 1220.

COST OF REFITTING OLD BOILER TUBES FOR OTHER SERVICE M & M., vol 25, p. 545. Table

DIFFERENCE IN COSTS FOR EQUIPPING AND OPERATING SHAFTS AND SLOPES IN FLAT COAL SEAMS: Cost of Rock Work; Tipple; Head-frame for Shafts and Trestle for Slopes; Grading at Foot of Shaft or Slope; of Hoisting or Haulage Machinery; Mine Haulage; and Rounding off Vertical Curves, Etc E & M. J., vol. 74, p. 407.

COST OF STEEL AND WOOD IN MINE SHAFTS. Min & Sci. Press, vol 85, p. 323. 2½ columns.

COST OF SHAFT GUIDES Oak, Vignol Rails, I-beams, T-iron, Etc., also Cost of Repairs Min. Mag, vol 13, p 227 ½ column.

COST OF CAGE GUIDES Wood and Steel. T. I. M E, vol 33, pp. 110, 111, 112, 118. Tables.

COST OF CONCRETE-LINING TO BRIER HILL SHAFT T. L. S. M I, vol 14, p. 145 Table.

See also USE OF CONCRETE IN MINES, and SHAFT LINING.

Cost of Mining

COST OF MINING T. A. I. M. E., vol 10, p 28

GENERAL MINING COSTS. M. & M., vol. 21, p 159. Table.

PROFITS AND LOSSES OF TWO METHODS OF MINING. Min & Sci. Press, vol. 19, p. 344. 1 column

THE CHEAPEST MINING Min & Sci. Press, vol. 88, p. 313 1½ columns

COST OF MINING. By J R. Finlay. E. & M. J., Feb. 23, 1905, p. 381. 3½ columns.

COST OF MINING PER TON HOISTED: Pyrites, Virginia. E & M. J., vol. 80, p 433. Tables.

COSTS AND PRICES OF MINING OPERATIONS IN MEXICO. T. I. M. & M., vol. 6, p 135

COST OF MINING OPERATIONS IN BURMA Driving Adits, Shafts, Milling and Total Costs. T. F. I. M. E, vol 12, p 511.

OLD TIME ARIZONA PRICES Min. & Sci. Press, vol. 71, p 121. ½ column. Table

VARIATIONS IN MINING COSTS By J. R. Finlay. Min. & Sci Press, vol. 96, p 22 6 columns Tables

COMPARATIVE TABLE OF WORKING COSTS FOR GOLD MINES. Min. & Sci. Press, vol. 96, p 23. Table

VARIATIONS IN MINING COSTS By J B Hastings Min & Sci Press, vol. 96, p. 420 7½ columns.

VARIATIONS IN MINING COSTS. By T A Rickard Min & Sci Press, vol. 97, p. 28. 4½ columns. Table.

WORKING COSTS By C E Palmer. E. & M J., vol 88, p. 1032 2½ columns. I.

THE COST OF MINING General Conditions. By J. R. Finlay. E. & M. J., vol 85, p. 795 17 columns.

NOTES ON UNDERGROUND MINING COSTS By H F Roche P C M. & M Soc. S. A, vol 7, p 5 8 columns, I; p 119, 1 column; p 141, 3½ columns

COST OF UNDERGROUND WORK P. C. M & M Soc. S. A, vol. 10, p 155. ½ column.

EFFECT OF DEPTH OF MINING UPON COSTS P C M. & M Soc S A., vol. 10, p 414 ½ column.

COST OF ASBESTOS MINING. Min. Mag, vol 13, p. 56. ½ column.

PROFITS IN MINING: Copper Mining Costs. E. & M. J., vol 53, pp. 128, 176, 201, 225, 250; vol 54, p. 123.

MINING COSTS AT MIAMI, ARIZONA M. & M., vol 30, p 83. ½ column

COST OF MINING OPERATION (COPPER) OF THE WALLAROO AND MOONTA,

- AUSTRALIA. E. & M J, vol. 81, p 1059. Tables.
- COST OF MINING COPPER ORES IN SHASTA COUNTY, CALIFORNIA. E. & M J., vol. 88, p. 399. 1 column
- COSTS AT THE BRADEN COPPER MINE. By W R Braden. Min & Sci Press, vol. 99, p. 759. 1 column. Table
- GENERAL WORKING COSTS AT THE BRADEN COPPER MINES, CHILE. E. & M. J., vol. 88, p. 1026. 1 column. Table
- GENERAL MINING COST AT THE BRADEN COPPER MINES, CHILE. M. & M, vol. 30, p. 506. Table.
- CONDITIONS AND COSTS OF MINING AT THE BRADEN COPPER-MINES, CHILE. By W Braden T A. I. M. E, vol 40, p 743. 3 pages.
- COST OF MINING OPERATIONS: Tyeo . Copper Company, Vancouver Island E. & M. J., vol. 80, p. 744. Table.
- ALLOUEZ MINING COMPANY, MICHIGAN. E. & M. J., vol. 51, p. 382. Table
- COST OF MINING AT CANANEA M & M., vol. 30, p. 29. Table.
- COST AT THE ATLANTIC MINE, LAKE SUPERIOR T I M. & M., vol. 7, p. 20. Table
- COST OF MINING OPERATIONS AT THE ATLANTIC, OSCEOLA, CENTRAL AND KEARSARGE MINES. E. & M J, vol 55, p. 320. Tables.
- COST OF ALL KINDS OF MINING WORK IN THE LAKE SUPERIOR COPPER MINES. T. A. I. M. E., vol. 6, p. 292.
- COSTS AT THE TAMARACK MINE, LAKE SUPERIOR T. I. M. & M, vol. 7, p 22. Table.
- COST OF UNDERGROUND WORK, QUINCY MINE, MICHIGAN. J. C. M I, vol 10, p. 415 $\frac{1}{2}$ page
- COSTS AT THE OSCEOLA MINE. By L. S. Austin. Min & Sci. Press, vol 98, p. 893. 1 column. Tables.
- CALUMET AND HECLA COSTS By L. S Austin Min. & Sci Press, vol. 97, p. 847, 3 $\frac{1}{2}$ columns, tables; p. 872, 2 $\frac{1}{2}$ columns.
- WORKING COSTS IN THE BUTTE COPPER MINES. M. & M, vol. 21, p. 158. $\frac{1}{2}$ column.
- COST OF OPERATIONS AT THE RUTH MINE, ELY, NEVADA. E. & M. J, vol. 84, p. 721. Table.
- WORKING COSTS ON MINES, AS PRACTICED ON THE RAND: Management. By J. A. Dennison. T. I. M. & M, vol. 18, p 108 24 $\frac{1}{2}$ pages.
- WORKING COSTS ON THE RAND AND COMPARISONS WITH MINES IN CALIFORNIA. By R. E Browne. Min. & Sci. Press, vol 95, p. 113. 8 columns. I.
- AVERAGE MINING AND MILLING COSTS ON THE RAND. Min & Sci. Press, vol 95, p. 520. Note
- See also COST OF MILLING.
- PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M E, vol. 39, p. 216. 1 page.
- WORKING COSTS AT RAND MINES. E. & M. J., vol. 85, p 823. 2 columns.
- COST OF GOVERNMENT REGULATION OF RAND MINES. E & M. J, vol. 85, p. 547. 2 $\frac{1}{2}$ columns.
- REDUCTION OF WORKING COSTS AT THE RAND MINES. By G A Denny. E. & M. J., vol. 85, p. 547. 12 columns.
- COSTS AND PROFITS ON THE WITWATERSRAND. By J. R. Finlay E. & M. J., vol. 86, p. 565. 7 $\frac{1}{2}$ columns.
- WORKING COSTS IN THE BARBERTON GOLDFIELD, SOUTH AFRICA. P C. M. & M. Soc. S. A., vol. 10, p. 132. 1 column. Tables.
- WORKING COSTS ON THE WITWATERSRAND E. & M. J., vol. 88, p 593. 3 columns.
- WORKING COSTS IN MINES, AS PRACTICED ON THE RAND. By J A.

- Dennison. Min. & Sci. Press, vol. 97, p. 192. $3\frac{1}{2}$ columns.
- COST OF MINING OPERATIONS IN SOUTH AFRICA. Min & Sci. Press, vol. 94, p. 311.
- COST OF WORKING GOLD MINES IN RHODESIA, SOUTH AFRICA. T. I. M. E., vol. 31, pp. 67, 76, 80, 86 and 96. Tables.
- WORKING COST OF SOME RAND MINES. P. C. & M. Soc. S. A., vol. 2, p. 149. $1\frac{1}{2}$ pages.
- COST OF WORKING A WIDE GOLD REEF IN RHODESIA, SOUTH AFRICA. T. I. M. & M., vol. 12, pp. 293, 300. Tables.
- WORKING COSTS ON THE RAND. P. C. & M. Soc. S. A., vol. 4, pp. 118, 119, 120, 123, 124, 131, 199, 203, 204, 205, 206, 207, 208, 209, 213, 214.
- GENERAL MINING COSTS ON THE WITWATERSRAND. T. I. M. & M., vol. 7, p. 6. Table
- COST OF WORKING BLANKET DEPOSITS, WEST AFRICA. T. F. I. M. E., vol. 2, p. 81
- WORKING COSTS AT THE FERREIRA GOLD MINING COMPANY, 1897. Witwatersrand Goldfields, p. 482. 4 pages.
- PROFITS IN MINING, WITWATERSRAND E. & M. J., vol. 81, p. 670. Table
- AFRICAN MINING COSTS Min. & Sci. Press, vol. 74, p. 344. Table
- COST OF MINING ON THE WITWATERSRAND. E. & M. J., vol. 76, p. 1005.
- THE COST AND PROFITS OF GOLD MINING IN SOUTH AFRICA. E. & M. J., vol. 64, p. 422. $1\frac{1}{2}$ columns
- COST OF MINING IN RHODESIA Min & Sci. Press, vol. 90, p. 106. Tables.
- COST OF MINING OPERATIONS IN RHODESIA. Pumping, Winding, Trammig, Compressor and Drills, Sharpening Drills, Sortang and Crushing, Surveying and Sampling. Min. & Sci. Press, vol. 90, pp. 119, 155. Tables.
- COST OF MINING IN GOLD MINE, RHODESIA Stopping and Filling in; Trammig, Winding and Pumping Power T. I. M. & M., vol. 12, p. 300
- See also COST OF VARIOUS OPERATIONS MENTIONED
- COST OF MINING AND MILLING FREE GOLD ORES. E. & M. J., vol. 42, p. 168. 3 columns.
- See also COST OF MILLING.
- COST OF MINING IN TRANSVAAL. E. & M. J., Mar. 23, 1905, p. 565. 1 column.
- COST OF MINING IN THE TRANSVAAL. Min. Mag., vol. 11, p. 451. Table.
- COST OF MINING ON THE RAND, SOUTH AFRICA E. & M. J., vol. 59, p. 535. $1\frac{1}{2}$ columns.
- COST OF MINING OPERATION ON THE RAND. E. & M. J., vol. 81, p. 851. Table.
- COST OF MINING OPERATIONS AT ALASKA TREADWELL GOLD MINES. E. & M. J., vol. 81, p. 1251.
- WORKING COST AT THE MITCHELL'S CREEK GOLD MINES, NEW SOUTH WALES. T. I. M. & M., vol. 15, pp. 538, 539
- COST OF MINING IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 195, 197, 205, 206, 207, 208, 209, 212. Tables
- COST (GENERAL) OF MINES IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., p. 473. 4 pages
- COST OF MINING OPERATIONS IN KALGOORLIE DISTRICT, AUSTRALIA. T. I. M. E., vol. 17, p. 363.
- COST OF MINING AND MILLING AT THE GREATEST AUSTRALIAN GOLD MINE. E. & M. J., vol. 42, p. 236. $\frac{2}{3}$ column
- COST OF MINING IN WESTERN AUSTRALIA. Min. & Sci. Press, vol. 93, p. 687. Table.
- CHEAP MINING IN AUSTRALIA. Min. & Sci. Press, vol. 78, p. 206. $\frac{1}{2}$ column.

- WESTERN AUSTRALIAN GOLD MINING COSTS. Min. & Sci Press, vol. 93, p 686. 5 columns.
- COST OF OPERATIONS AT MOUNT MORGAN MINE Min & Sci. Press, vol. 88, p. 182 Table.
- COSTS OF MINING GOLD ORE AT SARAWAK, BORNEO. T. I. M. & M, vol. 15, pp. 154, 155, 194.
- MINING COSTS IN THE COBALT DISTRICT, CANADA T. I. M. E., vol. 36, p. 591. 1½ pages. Tables.
- COST OF MINING, HANDLING, ETC., THE LE ROI MINING COMPANY: Tamarack Mining Company. E & M. J., vol. 75, pp 526, 527.
- MINING COST PER TON AT LE ROI, BRITISH COLUMBIA. E. & M. J, vol. 88, p. 104. 1½ columns. Table.
- COST OF MINING OPERATIONS IN THE WAR EAGLE AND CENTER STAR MINES, BRITISH COLUMBIA. M. & M., vol. 21, p. 367. Table.
- MINING COST, WAR EAGLE MINE, BRITISH COLUMBIA Min. & Sci. Press, vol. 90, p 268. ¾ column. Tables
- OPERATING EXPENSES AT THE CARIBOO MINE, BRITISH COLUMBIA. Min & Sci. Press, vol. 88, p. 148. Table
- WORKING COSTS, ROSSLAND, BRITISH COLUMBIA: Shaft Sinking, Rising, Drifting, and Extraction. M. & M, vol. 21, p 367. Table.
- See also COST OF THE VARIOUS OPERATIONS MENTIONED.
- COST OF MINING OPERATIONS OF WAR EAGLE MINE, BRITISH COLUMBIA. Min. & Sci. Press, vol. 80, p 262. Tables.
- COST OF MINING OPERATIONS AT CENTRE STAR MINE, ROSSLAND, BRITISH COLUMBIA. Min. & Sci. Press, vol. 87, p. 397. Table.
- COST OF MINING AT THE YELLOW ASTER MINE, MOJAVE DESERT. E. & M. J., vol. 77, p. 154. Table.
- COSTS OF MINING OPERATIONS AT THE PORTLAND MINE, COLORADO. E. & M. J., vol. 82, p. 774.
- COSTS OF MINING OPERATIONS AT THE PORTLAND MINE, COLORADO. T. A. I. M. E., vol. 37, p. 110. Tables.
- COST OF MINING OPERATIONS, CRIPPLE CREEK, COLORADO. Min. & Sci. Press, vol 88, p. 112. Table
- MINING COSTS AT CRIPPLE CREEK COLORADO. E & M. J., vol 76, p 766. 3 columns.
- MINING COSTS AT CRIPPLE CREEK, COLORADO. E. & M J, vol 77, p. 70. 1½ columns.
- MINING COST AT THE ALICE MINE, COLORADO M. & M., vol 29, p. 296. ½ column.
- AVERAGE WORKING COSTS PER TON OF ORE TREATED AT THE MAITLAND MILL, SOUTH DAKOTA (CYANIDE PLANT). T. A. I. M. E., vol 35, p. 635
- COST OF OPERATIONS AT THE REYNOLDS MINE, GEORGIA. T I M. & M., vol. 9, p. 371. Table.
- COST OF MINING IN KOREA Min. & Sci. Press, vol 93, p. 80. Table.
- COST OF MINING OPERATIONS IN THE CATORCE DISTRICT, MEXICO. E. & M. J., vol. 48, pp 476, 477.
- COSTS AT THE ESPERANZA MINE By W. E Hindry. Min. & Sci. Press, vol 100, p. 518. 2½ columns. Tables.
- MINING COSTS AT EL COBRE E. & M. J, vol. 86, p. 415. Tables.
- WORKING COST AT GUANAJUATO. E. & M. J., vol. 90, p. 723. 1 column.
- GENERAL OPERATING COSTS AT EL ORO AND DOS ESTRELLAS Min. & Sci. Press, vol. 96, p 198. Table.
- CHEAP MINING IN MONTANA. E & M J., vol. 55, p 364. ½ column.
- FORMER COST OF COMSTOCK MINING, COST OF SUPPLIES, ETC. Min. & Sci Press, vol. 77, p. 326. 1 column.
- COST OF MINING AT PIOCHE, NEVADA. Sch. Mines Quart., vol. 27, p. 383. Table.

- THE COST OF THE GOLDFIELD MINING BOOM. By A. Locke. Min. & Sci. Press, vol. 101, p. 541. 5 columns I.
- COSTS OF MINING IN NICARAGUA. Min. Mag., vol. 11, p. 512 Table
- COST OF MINING OPERATIONS IN EASTERN OREGON: Wages, Stoping, Drifting, Raising, and Timbering. M. & M., vol. 19, p. 15
- See also COST OF THE VARIOUS OPERATIONS MENTIONED.
- COST OF MINING IN UTAH. Min. & Sci. Press, vol. 40, p. 86. $\frac{1}{2}$ column
- GENERAL MINING COSTS AT THE SOUTH UTAH MINE. M. & M., vol. 31, p. 595. $\frac{1}{2}$ column.
- COST OF MINING AT THE STORMONT AND LAST CHANCE MINES. E. & M. J., vol. 29, p. 60 Table
- COST OF MINE WORK PER LINEAR FOOT, GRANITE MOUNTAIN MINING COMPANY. E. & M. J., vol. 44, p. 432. Table.
- COST OF MINING QUARTZ PYRITE GOLD DEPOSITS. By J. R. Finlay. E. & M. J., vol. 86, p. 512. 18 $\frac{1}{2}$ columns.
- COST AND PRICE OF MICHIGAN IRON ORE: Presidential Address. T. L. S. M. I., vol. 6, p. 13 10 pages
- SELLING PRICE OF NORTHERN IRON ORES FOR SEASON'S DELIVERY—1899. M. & M., vol. 20, p. 100
- COST PER TON OF MESABI IRON ORE. Min. & Sci. Press, vol. 67, p. 356. Table.
- COST OF MINING OPERATIONS IN THE NEW YORK HEMATITE MINES. E. & M. J., vol. 82, p. 555. $\frac{1}{2}$ column.
- COST OF MINING OPERATIONS AND TRANSPORTATION, ETC., OF LAKE SUPERIOR IRON-ORES. T. F. I. M. E., vol. 13, p. 545. Table.
- See also COST OF TRANSPORTATION.
- COST OF OPERATIONS AT PYRITES MINES. Sch. Mines Quart., vol. 7, pp. 169 and 166
- COST OF MINING IN SWEDEN. Min. & Sci. Press, vol. 45, p. 358. 1 $\frac{1}{2}$ columns.
- GENERAL MINING COST PER TON OF ORE IN SOFT AND SHEET GROUND, JOPLIN DISTRICT. M. & M., vol. 30, p. 665 Table
- MINING COSTS IN THE JOPLIN DISTRICT. By Doss Brittain. Min. & Sci. Press, vol. 96, p. 526. 1 $\frac{1}{2}$ columns.
- COST OF MINING IN THE LEAD AND ZINC MINES OF MISSOURI. M. & M., vol. 18, pp. 394, 481, 482 and 483, vol. 19, p. 104.
- OPERATING COSTS IN CŒUR D'ALENE MINES, IDAHO. Min. & Sci. Press, vol. 89, p. 222. Tables.
- COST OF MINING ORE AT BUNKER HILL AND SULLIVAN MINE, IDAHO. Min. & Sci. Press, vol. 97, p. 29 Table
- COST OF MINING, HAND-PICKING AND ORE DRESSING IN LEAD MINES, SPAIN. E. & M. J., vol. 73, p. 69.
- See also COST OF SORTING, and CONCENTRATION.
- GENERAL MINING COSTS IN THE NITRATE OF SODA MINES, CHILE. Min. & Sci. Press, vol. 100, p. 182 $\frac{1}{2}$ column.
- MINING COST IN THE CHILE NITER MINES. E. & M. J., vol. 90, p. 19 $\frac{1}{2}$ column.
- COST OF MINING OPERATIONS IN THE ANCHOR TIN MINE, TASMANIA. E. & M. J., vol. 81, p. 1240. Table.
- COSTS OF MINING OPERATIONS AT MOUNT BISCHOFF TIN MINES. Tin Deposits of the World, p. 172. Table.
- COSTS AT THE ANCHOR TIN MINE, TASMANIA. E. & M. J., vol. 81, p. 1249. 2 $\frac{1}{2}$ columns.
- COST OF OPERATIONS AT MOUNT BISCHOFF TIN MINES, TASMANIA. T. I. M. & M., vol. 14, p. 227. Tables.
- MINING COSTS IN THE CAPE COLONY TIN WORKINGS. P. C. M. & M. Soc. S. A., vol. 8, p. 180. Tables.

MINING COSTS IN RUSSIA: Bogoslovsk Mining Estate. T. A. I. M. E., vol. 39, p. 279, Tables; p. 288, Tables.

MINING COST AT THE LORRAINE MINES OF GERMANY AND FRANCE. E. & M. J., vol. 87, p. 1225. Table.

GENERAL MINING COST AT BOICZA, HUNGARY. Min. & Sci. Press, vol. 100, p. 34. $\frac{1}{2}$ column.

See also METHODS OF MINING, ETC.

Cost of Mining and Treatment

COST OF MINING AND MILLING. Min. & Sci. Press, vol. 73, p. 523. $1\frac{1}{2}$ columns.

COST OF MINING AND MILLING OPERATIONS. Min. & Sci. Press, vol. 86, p. 346. Table.

CHEAP MINING AND MILLING. Min. & Sci. Press, vol. 87, p. 214. $\frac{1}{2}$ column.

RELATIVE COST OF MINING AND MILLING. Min. & Sci. Press, vol. 87, p. 215.

CHEAP MINING AND MILLING. Min. & Sci. Press, vol. 79, p. 577. 1 column.

ECONOMICAL MINING AND MILLING. E. & M. J., vol. 50, p. 710. $\frac{1}{2}$ column.

COST OF MINING AND MILLING. By R. J. Grant. E. & M. J., vol. 79, p. 804. $4\frac{1}{2}$ columns.

CHEAP MINING AND MILLING OF ORE. Min. & Sci. Press, vol. 75, p. 547. $\frac{1}{2}$ column.

LOWEST COST OF MINING AND MILLING. Min. & Sci. Press, vol. 67, p. 165. 1 column.

CHEAP MINING AND MILLING. E. & M. J., vol. 45, p. 324. 1 column.

COST OF MINING AND MILLING FREE GOLD ORES. E. & M. J., vol. 42, p. 168. 3 columns.

THE COST OF MINING AND SMELTING. Min. & Sci. Press, vol. 33, p. 336. $\frac{1}{2}$ column.

COST OF ASPHALT MINING AND REFINING, INDIAN TERRITORY. E. & M. J., vol. 76, p. 928.

DETAILED COST OF MINING AND MILLING OPERATIONS, STE. GENEVIEVE, MISSOURI. E. & M. J., vol. 34, p. 70. 1 column.

COST OF MINING AND REDUCING ORES, ELY, NEVADA. Min. & Sci. Press, vol. 87, p. 54. Table.

COST OF MINING AND STAMPING COPPER ORE: Wolverine Mines. E. & M. J., vol. 75, p. 936.

See also COST OF REDUCTION, and STAMP MILL PRACTICE.

COST OF MINING AND EXTRACTION AT THE WOLVERINE MINE, LAKE SUPERIOR, MICHIGAN. Min. & Sci. Press, vol. 93, pp. 212, 214. Table.

COST OF MINING AND SMELTING AT BUTTE, MONTANA. E. & M. J., vol. 75, p. 708. $1\frac{1}{2}$ columns.

COST OF MINING OPERATIONS. E. & M. J., vol. 54, p. 347.

COST OF MINING AND EXTRACTION AT BUTTE, MONTANA. Min. & Sci. Press, vol. 93, p. 200.

COST OF MINING AND SMELTING IN JAPAN. Sch. Mines Quart., vol. 15, pp. 367 and 373. Tables.

See also COST OF METALLURGICAL TREATMENT.

COST OF MINING AND TREATMENT OF GOLD-ORES BY AMALGAMATION. T. A. I. M. E., vol. 14, p. 351.

COST OF MINING AND MILLING IN RHODESIA. Min. Mag., vol. 13, p. 9. Tables.

COST OF MINING AND MILLING GOLD QUARTZ. Min. & Sci. Press, vol. 43, p. 121. $\frac{1}{2}$ column.

COMPARATIVE COST OF MINING AND MILLING IN WESTERN AUSTRALIA AND SOUTH AFRICA. Gold Min. & Mill., W. Aus., pp. 460, 461.

COST OF MINING AND MILLING AT THE GREATEST AUSTRALIAN GOLD MINE. E. & M. J., vol. 42, p. 236. $\frac{1}{2}$ column.

- COMPARATIVE COSTS OF MINING TREATMENT, ETC., FOR YEARS 1893-1903: Mount Morgan Gold Mining Company. E & M J, vol 76, p p. 435. Table.
- RELATIVE COST OF MINING AND MILLING IN CALIFORNIA Min. & Sci. Press, vol. 73, p 295. Table.
- CHEAP CALIFORNIA MINING AND MILLING. Min & Sci. Press, vol. 76, p. 225.
- MINE AND MILL COST: Standard Consolidated Mining Company, California E. & M J., vol. 76, p. 397. Tables.
- COST OF MINING AND MILLING IN NORTHERN CALIFORNIA. Min & Sci. Press, vol. 93, p 286. Table.
- COST OF MINING AND MILLING IN MOJAVE DESERT, CALIFORNIA Min & Sci. Press, vol. 87, p 405. Table
- COST OF MINING AND MILLING THE MARMORA, ONTARIO, GOLD ORES. E & M J, vol. 30, p 298 1 column
- COST OF MINING AND MILLING IN NOVA SCOTIA, ALSO LABOR COSTS Min. & Sci. Press, vol. 91, p. 290.
- COST OF MINING AND MILLING GOLD-ORES IN NOVA SCOTIA. By W. I. Pierce. T. A. I. M. E, vol. 13, p. 659
- COSTS OF MINING AND MILLING IN NOVA SCOTIA. Min & Sci. Press, vol 91, p. 290.
- COST OF MINING AND MILLING GOLD ORES IN SAN JUAN DISTRICT, COLORADO. E & M J., vol. 73, p. 696. $\frac{1}{2}$ column.
- MINING AND MILLING COSTS IN THE MONTEZUMA DISTRICT, COLORADO. M. & M, vol. 28, p. 503. $\frac{1}{2}$ column.
- CHEAP MINING AND MILLING IN SOUTH DAKOTA By E. J. Kennedy. Min. & Sci. Press, vol. 93, p. 545. $\frac{1}{2}$ column.
- COST OF MINING AND MILLING TELLURIDE ORES IN THE BLACK HILLS. Min & Sci. Press, vol. 87, p. 290. Table.
- COST OF MINING AND MILLING OF GOLD IN KOREA. T I. M & M, vol 12, p 242
- COST OF MINING AND MILLING, SUMMIT VALLEY DISTRICT, MONTANA. Min. & Sci Press, vol 41, p 98.
- COST OF MINING AND MILLING, BIG INDIAN MINE. Min & Sci Press, vol 87, p 237 Table.
- COST OF MINING AND MILLING AT THE CACTUS MINE, BEAVER COUNTY, UTAH. E & M J., vol. 81, p 813
- COST OF MINING AND TREATMENT AT THE HAILE MINE, VIRGINIA E & M. J, vol 62, p 7. Table.
- COSTS OF MINING AND MILLING AT SANTA FE T. I. M. & M., vol 12, p. 95. Tables.
- CHEAP MINING AND MILLING AT THE SPANISH MINE Min. & Sci Press, vol 80, p. 318 $2\frac{1}{2}$ columns Tables.
- COST OF MINING AND TREATMENT, CŒUR D'ALENE, IDAHO Min & Sci Press, vol. 91, pp 78, 79. Tables
- COST OF LEAD MINING AND SMELTING IN SPAIN E. & M J, vol. 86, p. 329. $1\frac{1}{2}$ columns
- COST OF MINING AND TREATING LEAD-ORES IN MEXICO. T. A I. M E, vol. 13, p. 366
- COST OF MINING AND CLEANING THE ORE IN JOPLIN DISTRICT E & M. J., vol 58, p. 392, $\frac{1}{2}$ column; p 413, $1\frac{1}{2}$ columns; p. 437, 2 columns; and p. 460, $1\frac{1}{2}$ columns.
- COST OF MINING AND MILLING BLUE ROCK PHOSPHATE IN TENNESSEE. E. & M. J., vol. 80, p 206.
- COST OF MINING AND CONCENTRATING IN THE ZEEHAN AND DUNDAS SILVER FIELD. T. I. M & M., vol. 4, p 63.
- See also COST OF MINING, COST OF MILLING, and CONCENTRATION.

Cost of Coal Mining

AN INVESTIGATION OF THE COST OF MINING COAL. By J. R. Finlay. E. & M. J., vol. 87, p. 948. $10\frac{1}{2}$ columns.

- DETAILED COSTS OF MINING COAL Second Geol. Sur. Pa., AC, pp 359, 360, 362, 363-367.
- THE COST OF MINING COAL E. & M. J., vol. 87, p. 1099. 6½ columns.
- ECONOMY IN THE PRODUCTION OF COAL. Am. Jour. Min., vol. 2, p. 44. ½ column
- COST IN NARROW AND GOB ENTRY METHODS OF WORKING M. & M., vol. 19, p. 59. Table.
- SOME ITEMS OF COST OF COAL MINING. E. & M. J., vol. 25, p. 252. ¾ column.
- COMPARATIVE COST OF LONGWALL AND PILLAR AND STALL METHODS. Coll Engr., vol 9, p 122. Tables.
- COST OF WORKING BY ROOM AND PILLAR SYSTEM WITHOUT GOBBING-UP. T. A I M. E., vol. 2, p 110.
- COST OF COAL MINING. E. & M. J., vol 54, p 241. ¾ column
- EXPENSE OF KEEPING A LARGE COLLIERY IN WORKING ORDER E. & M. J., vol. 73, p. 753.
- PRICE AND PRODUCTION OF COAL E. & M. J., vol. 74, p 672. 1½ columns
- COMPARATIVE COSTS OF THE PILLAR-AND-CHAMBER, PILLAR-AND-CHAMBER RETREATING, AND PANEL SYSTEM RETREATING. M. & M., vol. 27, p 534 Tables
- COMPARATIVE COST OF WORKING AN 18-IN. COAL-SEAM: When Bottom-Cutting Is Used as Gobbing; and Bottom Cutting Is Used as Brick Material. T. I. M. E., vol. 15, p. 61. Table.
- COST OF GETTING COAL. E & M. J., vol. 87, p. 1044. 1 column.
- COST OF USE OF HYDRAULIC MINING CARTRIDGES. T. I. M. E., vol. 15, p. 272. Table.
- COMPARATIVE COSTS OF HYDRAULIC COAL GETTERS AND EXPLOSIVES. M. & M., vol. 27, p. 247. Tables.
- SEE ALSO MECHANICAL MINING APPLIANCES: GETTERS.
- COST OF COAL GETTING E & M J., vol 48, p. 139. Tables
- COST OF MACHINE MINING OF COAL. M. & M., vol. 17, p 315. Table.
- COST OF REPAIRS FOR MACHINE MINING IN VIRGINIA COAL MINES. E. & M. J., vol. 84, p. 408.
- COST OF INSTALLATION AND MINING COAL BY MACHINES. By F. W. Parsons. E. & M J., vol. 82, p. 304. 2 columns.
- COST OF MACHINE-MINING AND PICK-MINING COMPARED T. I. M. E., vol 17, pp. 174, 175, 176
- COSTS OF MACHINE MINING OF COAL. E. & M J., vol. 89, p. 624. 1½ columns
- COST OF MACHINE MINING OF COAL. T. I. M. E., vol. 31, pp. 388, 417, 429.
- COST OF MINING COAL BY MACHINES. Sch. Mines Quart., vol. 9, p. 313. Tables.
- COSTS OF COAL-CUTTING BY MACHINERY. T. F. I. M. E., vol. 11, pp 199, 200.
- COST OF CUTTING COAL BY MACHINE vs. HAND. T. F. I. M. E., vol 1, p. 126, Table; p. 132, Table; p 138, Table.
- ELECTRIC MINING MACHINERY: Some Investigations in Regard to Cost of Operation in Various Mines. By J. N. Bulkley. M. & M., vol. 18, p. 170. 8 columns.
- COST OF ELECTRIC vs. COMPRESSED AIR WORK IN COAL-CUTTING. T. F. I. M. E, vol. 11, pp. 499 and 500. Tables.
- COST OF OPERATING ELECTRIC COAL MINING MACHINES. P. E. Soc. W. Pa., vol. 13, p. 165. Table.
- COST OF ELECTRIC COAL-CUTTING AT THE GLENLEILLAND COLLIERY. T. F. I. M. E., vol. 9, p. 136. Table.
- See also ELECTRIC COAL MINING MACHINES.
- COST OF MINING COAL, RED BANK REGION, PENNSYLVANIA. E. & M. J., vol. 18, p. 51. 1 column.

- COST OF MINING COAL IN THE PENNSYLVANIA COAL MINES. Rept Insp. Mines, Pa., 1879, pp. 321 and 323 Tables
- COST OF MINING AT DANVILLE, PENNSYLVANIA. T. A. I. M. E., vol 20, p 384
- COST OF MINING IN SOME PENNSYLVANIA ANTHRACITE COLLIERIES. E. & M. J., vol. 45, p. 193. 1½ columns.
- ESTIMATED COST OF ANTHRACITE MINING BY WITHDRAWING. E. & M. J., vol. 48, p. 380. Table
- COST OF ANTHRACITE COAL MINING PER CAR, OR WHEAT THE MINER GETS. E. & M. J., vol. 73, pp 754 and 887.
- COST OF ANTHRACITE MINER'S OUTFIT. The Anthracite Coal Industry, Roberts, p. 112. Table.
- INCIDENTAL WORKING EXPENSES OF ANTHRACITE MINER. The Anthracite Coal Industry, Roberts, p 113. Table.
- COST OF MINING IN THE WYOMING REGION. E. & M. J., vol 17, p 37 2 columns.
- THE COST OF ANTHRACITE COAL. Coll Engr., vol. 13, p. 126. 2 columns.
- COST OF PRODUCING A TON OF ANTHRACITE COAL. The Anthracite Coal Industry, Roberts, pp. 45 and 57. 10 pages. I
- THE COST OF ANTHRACITE COAL E. & M. J., vol. 80, p. 595. 2 columns.
- PRICE PAID THE MINERS FOR CHAMBER WORK IN ANTHRACITE COAL MINES OF PENNSYLVANIA. The Anthracite Coal Industry, Roberts, p. 28.
- See also MINER'S WAGES
- THE COST OF MINING ANTHRACITE. E. & M. J., vol. 79, p. 793. 1½ columns.
- COST OF RECOVERY OF ANTHRACITE FROM CULM BANKS. E. & M. J., vol. 85, p 720. 2 columns.
- THE COST OF COAL AND IRON IN ALABAMA E. & M. J., vol. 57, p. 74. 1½ columns.
- COST OF MINING COAL IN THE CROW'S NEST PASS, CANADA, FOR WIDE AND NARROW WORK, ALSO COST OF HOISTING AND SCREENING. E. & M. J., vol 73, p 758 ½ column.
- COST OF COAL-MINING IN CHILE, SOUTH AMERICA T. I. M. E., vol. 15, p. 242. Table
- COST OF MINING IN THE KAIPING COAL MINES, CHINA. T. I. M. & M., vol 10, p. 425.
- COST OF PRODUCTION OF COAL AT THE MOUNT DIABLO COAL MINES. Min. & Sci. Press, vol. 35, p 8. ½ column.
- COST OF COAL MINING IN GERMANY. E. & M. J., vol 77, p. 804. ½ column.
- MINING COSTS IN ILLINOIS. T. A. I. M. E., vol 40, p 43 2 pages
- COST OF COAL-MINING IN INDIA T. I. M. E, vol 27, p 191 Table.
- COST OF MINING OPERATIONS IN INDIA (COAL). T. I. M. E, vol 22, p. 191.
- COST OF MINING COAL IN INDIANA. E. & M. J., vol. 90, p 869. ½ column.
- COST OF UNDERCUTTING COAL IN IOWA T. F. I. M. E., vol. 13, p. 488.
- COST OF COAL MINING IN MEXICO E. & M. J, vol. 89, p. 1076. 1 column
- ESTIMATED COSTS OF MINING AND COKING AND RELATIVE COMMERCIAL RETURNS FROM OPERATING IN THE CONNELLSVILLE AND WALSTON-REYNOLDSVILLE DISTRICTS, PENNSYLVANIA By E. V. D'Invilliers. T. A. I. M. E., vol. 35, p. 44 16 pages. M. & M., Jan., 1905, p. 313. 8 columns.
- COST SHEET OF A VIRGINIA COLLIERY. E. & M. J., vol. 87, p. 950 Table.
- COST OF COAL MINING IN EUROPE. E. & M. J., vol. 71, p. 656.

See also COST OF COAL MINING.

COST OF WORKING SEAMS OF DIFFERENT THICKNESS IN ENGLAND, FRANCE, ETC. T I M. E., vol 20, pp. 138, 139.

COMPARATIVE COSTS AND OUTPUTS OF VARIOUS METHODS OF MINING IN THE ST. ETIENNE COAL FIELDS T. I M. E., vol. 36, p. 421 3 pages.

COST OF GETTING COAL IN A SOUTH YORKSHIRE COLLIERY. Engineering, London, vol. 74, p. 262. Table.

COST OF CUTTING COAL WITH THE JEFFREY MACHINE, CANNOCK WOOD PRIS, ENGLAND. T. F. I M E, vol. 7, p 307. Table.

See also BREAKING DOWN COAL AT THE FACE, and MINING MACHINERY AT THE FACE.

COST OF HEWING COAL IN ENGLISH MINES. Coll. Working and Management, pp. 219 and 220. Tables.

COMPARATIVE COSTS OF MINING BY DIFFERENT SYSTEMS IN ENGLAND. Coll. Working and Management, pp. 227, 228, 231, 232. Tables

PRICES PAID IN ENGLAND FOR BOARD AND WALL WORK. Coll. Working and Management, pp. 78, 79 and 94. Tables.

COST OF COAL MINING IN WEST YORKSHIRE COAL FIELDS. T. F I. M. E., vol. 7, p. 143.

COST OF MINING COAL IN ENGLAND FROM 1763-1836. Coll. Working and Management, p. 15. Tables.

COSTS OF MINING COAL IN ENGLAND-Panel System, and Modified Long-wall. Coll. Working and Management, pp. 243, 245, 246, 247 Tables.

See also PANEL MINING.

COST OF COAL CUTTING IN THE NORTHERN COALFIELD, ENGLAND. E. & M. J., vol. 86, p. 1105. 1½ columns.

THE COST OF LONGWALL IN ENGLAND. By G. R. DIXON. E. & M. J., vol. 86, p. 964. 6½ columns. I.

LONGWALL TONNAGE PRICES IN ENGLAND. E. & M J., vol. 85, p. 1148. Table.

See also LONGWALL MINING.

COST OF ROBBERING PILLARS IN ENGLISH COAL MINES: Coll. Working and Management, pp. 173 and 191. Table.

COST OF WORKING PILLARS. Coll. Working and Management, p. 245. Table.

See also DRAWING PILLARS IN COAL MINES.

Cost of Metal Mining

COST OF MINING. By W. R. Ingalls. E. & M. J., vol. 80, p. 302. 3½ columns.

THE COST OF MINING. By W. R. Ingalls. E. & M. J., Feb. 16, 1905, p. 317, 5½ columns; vol. 79, p. 909, 2 columns; vol. 80, p. 62, 7 columns.

COMPARATIVE MINING COSTS: Mining, Transport, Milling, Concentrating, Cyaniding, etc. E. & M. J., vol 75, p. 971. ¼ column.

EFFECT OF WIDTH OF VEIN ON COST OF MINING. E. & M. J., vol. 83, p. 965. ¼ column.

THE COST OF MINING. Min. & Sci. Press, vol. 91, p 53. 1½ columns.

THE CHEAPEST MINING. Min. & Sci. Press, vol. 91, p 135. ¼ column.

CHEAP GOLD MINING AND MILLING IN THE BLACK HILLS. Min. & Sci. Press, vol. 91, p. 137. 2 columns.

MINING COSTS IN SAN JUAN, COLORADO. Min. & Sci. Press, vol. 91, p. 206.

COSTS IN MINING: Crosscutting and levels. By W. H. Storms. Min & Sci. Press, vol. 89, p. 322. 1½ columns.

DETAILED COST OF MINING IN THE ELKHORN MINING DISTRICT, MONTANA. U. S. G. S., 22nd Rept., pt. 2, p. 418. Table.

WORKING COSTS IN THE FATHOMAGE SYSTEM. Min. & Sci Press, vol. 101, p. 410 1½ columns.

See also the CONTRACT SYSTEMS.

DIFFERENCE OF COST OF MINING IN WET AND DRY GROUND E. & M. J., vol. 80, p. 819.

COST OF MINING BY FIRE-SETTING vs. HAND WORK. T. F. I. M. E., vol. 5, p. 87.

COST OF DRIFT MINING. Min. & Sci Press, vol. 60, p. 286 Table

COST OF DRIFT MINING. Min. & Sci Press, vol. 68, p. 22 Tables.

DRIFT MINING COSTS. Min. & Sci. Press, vol. 74, p. 213. ¾ column

COST OF DRIFT MINING, CALIFORNIA. Min. & Sci Press, vol. 53, p. 20 Table.

COST OF DRIFT-MINING. Sch. Mines Quart., vol. 8, p. 300, etc.

See also DRIFT MINING.

COST OF MINING COPPER ORE CONTAINING HEAVY SPAR. Min. & Sci. Press, vol. 89, p. 194 Table.

COST OF MINING OPERATIONS OF THE OLD DOMINION COPPER AND SMELTING COMPANY, ARIZONA. E. & M. J., vol. 79, p. 1155.

COST OF MINING AT THE HOMESTAKE MINE. T. A. I. M. E., vol. 17, p. 577. Table

COST OF MINING BY THE CAVING SYSTEM AT BINGHAM CANYON, UTAH E. & M. J., vol. 84, p. 439. 1 column.

COST OF MINING AND TREATMENT OF RIO TINTO COPPER ORES. E. & M. J., vol. 36, p. 325 ½ column. Table.

COST OF MINING OPERATIONS OF COPPER AND TIN ORES IN INDIA. T. F. I. M. E., vol. 9, p. 449.

COST OF MINING: Tamarack Mining Company. E. & M. J., vol. 46, p. 217. Table.

COST OF MINING, ANACONDA COPPER COMPANY, MONTANA. Ore Dressing, Richards, vol. 2, p. 1130. Table.

COST OF MINING BY CAVING SYSTEM AT ELY, NEVADA. M. & M., vol. 29, p. 80, 1 column; p. 82, table.

COST OF MINING IN LAKE SUPERIOR. E. & M. J., vol. 78, p. 906 Table
See also THE CAVING SYSTEMS OF MINING.

COST OF MINING OPERATIONS IN LEAD MINES OF AFGHANISTAN. T. F. I. M. E., vol. 6, p. 455

PROFITS OF GOLD MINING. Min. & Sci Press, vol. 67, p. 339 1 column.

PROFIT PER TON OF PRINCIPAL GOLD MINES OF THE WORLD T. I. M. & M., vol. 12, p. 277 Table

COST OF WORKING GOLD DEPOSITS. Min. & Sci Press, vol. 60, p. 336. ½ column

COST OF MINING ON THE RAND. Gold Mines on the Rand, pp. 258, 264 and 265. Table

MINING COST PER TON UNDERGROUND, RAND MINES, RAND, SOUTH AFRICA M. & M., vol. 27, p. 188 Table.

COST OF MINING IN UTAH (1880). Min. & Sci. Press, vol. 40, p. 86 Table

COSTS OF MINING ON THE RAND IN 1891 T. F. I. M. E., vol. 3, pp. 870, 871, 872.

COSTS AT THE ALASKA-TREADWELL MINES. Min. & Sci Press, vol. 85, p. 174 2½ columns.

THE COST OF MINING AT BROKEN HILL, AUSTRALIA. Miner's Pocket Book, Lock, p. 260. Table.

COST OF STOPING, LUCKNOW, NEW SOUTH WALES. Miner's Pocket Book, Lock, p. 276. Table.

WORKING COSTS IN THE DEEP LEADS OF VICTORIA T. I. M. & M., vol. 17, p. 254. 10 pages. Tables

CONDITIONS AFFECTING COST OF WORKING THE DEEP LEADS OF VICTORIA T. I. M. & M., vol. 17, p. 224. 3 pages.

COST OF GOLD-MINING IN NEW ZEALAND. T. F. I. M. E., vol. 10, p. 411. Table.

COST OF OPERATIONS: Gold Mining in Brazil. T. F. I. M. E., vol. 4, p. 232. Table.

- WORKING COSTS AT ROSSLAND, BRITISH COLUMBIA. M. & M., vol. 21, p. 367.
- COST OF CENTRE STAR MINING OPERATIONS. Min. & Sci. Press, vol. 82, p. 49. Table.
- THE GWIN MINE COST SHEET. Min. & Sci. Press, vol. 82, p. 62. Table.
- COST OF MINING OPERATIONS AT THE LE ROI MINE, ROSSLAND, BRITISH COLUMBIA. J. C. M. I., vol. 5, p. 314, etc.
- COST OF MINING AND MILLING "FREE" GOLD ORES: California, Dakota, Venezuela, etc. Min. & Sci. Press, vol. 53, p. 135 3½ columns.
- See also COST OF MINING AND TREATMENT.
- COST OF MINING, MAHONEY MINE, CALIFORNIA. Min. & Sci. Press, vol. 82, p. 6. Table.
- COSTS, 30 YEARS AGO AND NOW, GEORGETOWN, COLORADO. Min. & Sci. Press, vol. 82, p. 157. Table.
- COST OF MINING OPERATIONS: Cripple Creek; Rossland, British Columbia, and Cœur D'Alene District. Rept. Zinc Comm., Canada, p. 42. 8 pages.
- GENERAL MINING COST, CRIPPLE CREEK. E. & M. J., vol. 87, p. 957. 1½ columns.
- COST PER FOOT OF MINING AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, p. 1327. Table.
- COST OF MINING IN COLORADO. Min. & Sci. Press, vol. 23, p. 83. 1 column.
- COST OF MINING AND LABOR IN THE REMEDIOS, COLOMBIA, MINES. T. I. M. & M., vol. 4, pp. 14 and 20.
- See also COST OF LABOR.
- COST OF MINING HOMESTAKE MINE, South Dakota. Min. & Sci. Press, vol. 88, p. 165. Table.
- COST OF MINING AT THE HOMESTAKE, DAKOTA. T. A. I. M. E., vol. 17, pp. 577, 578.
- COST OF MINING OPERATIONS IN INDIAN GOLD-FIELDS. T. F. I. M. E., vol. 11, pp. 353, 358, 365.
- COST OF MINING OPERATIONS IN THE GOLD MINES OF JAPAN. T. I. M. & M., vol. 15, pp. 219, 220, 221.
- COST OF MINING OPERATIONS AND SUPPLIES OF COMBINATION MINES, GOLDFIELD, NEVADA. E. & M. J., vol. 80, p. 74. Table.
- COSTS OF GLORY-HOLE MINING AT THE DE LAMAR MINES, NEVADA. E. & M. J., vol. 87, p. 453. Tables.
- See also OPEN CUT MINING.
- THE COST OF MINING. E. & M. J., vol. 79, p. 669 3 columns.
- MINING COST AT MERCUR, UTAH. M. & M., Aug., 1904, pp. 2 and 3; E. & M. J., vol. 79, p. 1005. 2½ columns.
- METHOD OF MINING, MERCUR, UTAH. Costs of Mining, M. & M., Aug., 1904, pp. 2 and 3.
- COST OF IRON ORE MINING IN THE LAKE SUPERIOR MINES. Min. & Sci. Press, vol. 72, p. 461, ½ column; vol. 73, p. 7. Table.
- COST OF MINING AND TIMBERING IN THE SOFTER HEMATITE ORES OF FURNESS, ENGLAND. T. F. I. M. E., vol. 8, p. 49.
- See also COST OF SUPPORT.
- COST OF MINING ZINC ORES IN MISSOURI. E. & M. J., vol. 65, p. 367.
- COST OF EXTRACTION OF ORE AT GALENA, KANSAS. Univ. Geol. Sur. of Kans., vol. 8, p. 350. ¼ page.
- COST OF MINING IN JOPLIN DISTRICT. M. & M., vol. 18, p. 394. Table.
- COST OF MINING PENNSYLVANIA ZINC ORES. E. & M. J., vol. 24, p. 3. Table.
- DETAILED COST OF MINING OPERATIONS AT JOPLIN AND WEBB CITY, MISSOURI. Univ. Geol. Sur. of Kans., vol. 8, p. 373. Table.
- COST OF MINING IN THE JOPLIN REGION. Ore Dressing, Richards, vol. 2, p. 1129. Table.

88 COST OF MINING, MILLING, METALLURGY, ETC.

- COST OF MINING QUICKSILVER.** Min. & Sci. Press, vol. 68, p. 50. Tables.
- COST OF MINING IN THE GUADALCAZAR DISTRICT, MEXICO (QUICKSILVER)** T. I. M. & M., vol. 4, p. 137.
- COST OF MINING AT POTOSI, BOLIVIA.** T. A. I. M. E., vol. 19, p. 95.
- COST OF MINING AT THE CARIBOU SILVER MINES, COLORADO: Shaft Sinking, Level Driving, Tunnelling, and Stoping.** E. & M. J., vol. 24, p. 105. Table
- COST OF MINING OPERATIONS FOR WESTERN MINES: Comstock Lode The Mines of the West, Raymond, 1869,** pp. 62 to 75.
- COST OF SILVER-MINING IN MEXICO** T. I. M. E., vol. 21, p. 213.
- COST OF MINING AT LA DESCUBRIDORA MINE, MEXICO** E. & M. J., vol. 72, p. 699.
- COST OF MINING OPERATIONS IN THE TIN MINES OF TASMANIA.** T. F. I. M. E., vol. 13, p. 581.
- COST OF TIN MINING OPERATIONS AT PERAK, CHINA.** T. I. M. & M., vol. 6, p. 65, etc.
- THE COST OF MINING AND EARTH-WORK IN ASIA MINOR, PERSIA, AND BURMA.** By T. T. Wynne. T. I. M. & M., vol. 4, p. 290
- COST OF QUARRYING ORE IN THE OPEN, COST IN THE "JOYA" MINE PER TON OF 1000 KILOS, SPAIN.** T. A. I. M. E., vol. 21, p. 93
- See also **METHODS OF MINING: General and Miscellaneous.**
- Cost of Milling**
- MILLING COSTS.** By R. S. Handy. Min. & Sci. Press, vol. 98, p. 156. 2 columns. D.
- MILLING COSTS.** P. C. M. & M. Soc. S. A., vol. 8, p. 238. Tables
- CHEAP MILLING AND MINING.** Min. & Sci. Press, vol. 74, p. 473. $\frac{1}{2}$ column
- COST OF ORE-TREATMENT.** T. F. I. M. E., vol. 4, pp. 355, 356, 357, 358, 362, 363, 366, 371, 396, 406, 407, 408.
- COST OF CONSTRUCTION AND OPERATION OF DRESSING WORKS.** Min. & Sci. Press, vol. 34, p. 233. $\frac{1}{2}$ column.
- COST OF MILLING ORE: How the Cost is Reduced.** Min. & Sci. Press, vol. 45, p. 204. $\frac{1}{2}$ column.
- COST OF MILLING, PAST AND PRESENT** Min. & Sci. Press, vol. 74, p. 235. Table.
- COST OF MILLING IN SEVERAL OF THE WESTERN STATES** Min. & Sci. Press, vol. 53, p. 135.
- FACTORS AFFECTING COST OF MILLING Ore Dressing,** Richards, vol. 2, p. 1127. 2 pages.
- THE COST OF GOLD MILLING** Min. & Sci. Press, vol. 87, p. 10. 2 $\frac{1}{2}$ columns Table.
- COST OF MILLING SILVER ORES** Min. & Sci. Press, vol. 57, p. 344 $\frac{1}{2}$ column.
- COST OF ORE TREATMENT: Especially Gold.** T. F. I. M. E., vol. 5, pp. 286, 288, 289, 290, 292, 293, 294, 295, 297, 315, 317, 323, 326, 334, 335, 339, 340, 341, 345, 348, 350; vol. 6, pp. 77, 78, 87, 91, 101, 102, 103, 107, 108, 310, 311, 337, 485, 487, 488; vol. 7, pp. 75, 81, 83, 84, 86, 87, 93, 94.
- COST OF MILLING ON THE RAND.** Gold Mines of the Rand, p. 261. $\frac{1}{2}$ column
- COST OF GOLD MILLING.** T. F. C. M. I., vol. 3, p. 106. Table
- COSTS OF THE ELMORE PROCESS.** E. & M. J., vol. 88, p. 207. $\frac{1}{2}$ column.
- COST OF CONCENTRATION BY ELMORE PROCESS** Min. & Sci. Press, vol. 86, p. 338. $\frac{1}{2}$ column
- COST OF ELMORE OIL CONCENTRATION IN WESTERN AUSTRALIA.** Gold Min. & Mill., W. Aus., p. 414.
- COST OF THE FLOTATION PROCESS.** Min. & Sci. Press, vol. 94, p. 730.

- COST OF THE ELMORE VACUUM FLOTATION PROCESS.** E. & M. J., vol. 83, p. 1205. $\frac{1}{2}$ column.
- See also FLOTATION PROCESSES
- COST OF CONCENTRATION WITH THE FRUE VANNER** Gold Mines of the Rand, pp. 207, 261. Table.
- COST OF VANNER REPAIRS:** Belts, etc., for Various Makes. Ore Dressing, Richards, vol. 2, p. 664. Tables.
- COST OF WOOD JIG GRATES.** E. & M. J., vol. 88, p. 1025. $\frac{1}{2}$ column.
- COST OF MAGNETIC SEPARATION BY WETHERILL SEPARATOR IN COLORADO.** E. & M. J., vol. 83, p. 1137.
- COST OF MAGNETIC SEPARATION OF ZINC ORES.** Rept. Zinc Comm., Canada, pp. 88 and 99. Tables
- PRICE OF DING'S MAGNETIC SEPARATOR, SIZES, ETC.** Rept. Zinc Comm., Canada, p. 114. Table
- COST OF CONCENTRATION OF IRON-ORE BY MAGNETIC SEPARATORS.** T. A. I. M. E., vol. 20, p. 608.
- COST OF CONCENTRATION WITH WETHERILL MAGNETIC CONCENTRATOR.** E. & M. J., vol. 64, p. 100
- COST OF MAGNETIC CONCENTRATION AT TILLY FOSTER MINE.** T. A. I. M. E., vol. 21, p. 521.
- COST OF MAGNETIC CONCENTRATION OF IRON-ORE AT TILLY FOSTER MINE.** T. A. I. M. E., vol. 19, p. 73.
- See also MAGNETIC SEPARATION.
- COST OF BLAKE-MORSCHER ELECTRO-STATIC SEPARATOR.** Rept. Zinc Comm., Canada, p. 119.
- See also ELECTRO-STATIC SEPARATION.
- COST AT THE ATLANTIC MILL, LAKE SUPERIOR, FOR 1881-1887.** T. A. I. M. E., vol. 17, p. 676.
- COST OF CONCENTRATING COPPER-ORES IN AUSTRALIA.** T. I. M. E., vol. 23, p. 521.
- COST OF MINING AND TREATMENT OF RIO TINTO COPPER ORES.** E. & M. J., vol. 36, p. 325. Table.
- See also COST OF MINING AND TREATMENT.
- COST OF MILLING, ANACONDA COPPER COMPANY Ore Dressing, Richards,** vol. 2, p. 1130. Table.
- MILLING COST AT LAKE SUPERIOR COPPER MILLS, FROM REPORTS.** Ore Dressing, Richards, vol. 2, p. 1131. 1 page.
- MILLING COST, ATLANTIC MINE AND MILL.** T. I. M. & M., vol. 7, p. 20. Table
- COST OF ORE TREATMENT, MOUNT LYELL.** Min. & Sci. Press, vol. 86, p. 332. Table.
- COST OF CONCENTRATING AT THE WALL MILL, BINGHAM, UTAH.** E. & M. J., vol. 82, p. 1011. $\frac{1}{2}$ column.
- COST OF EXTRACTION IN THE BOSTON MILL, BINGHAM, UTAH.** E. & M. J., vol. 84, p. 485. 1 column.
- COST OF MILLING PYRITIC ORES ON THE RAND.** T. I. M. & M., vol. 7, p. 137. Table.
- MILLING COSTS ON THE WITWATERS-RAND.** T. I. M. & M., vol. 7, p. 6. Table.
- COST OF ORE TREATMENT ON THE RAND** Min. Mag., vol. 12, pp. 175, 176, 186.
- COST OF STAMPING AND TREATMENT PER TON ON THE RAND.** E. & M. J., vol. 78, p. 141. Tables.
- COST OF DRYING ORE ON RAND** J. C. & M. Soc. S. A., vol. 1, p. 82. $\frac{1}{2}$ page.
- GENERAL WORKING (MILLING) COSTS FOR THE RAND.** E. & M. J., vol. 88, p. 1069. 6 columns. Tables.
- COST OF MILLING AT ALASKA-TREADWELL MINES.** E. & M. J., vol. 77, p. 715. $\frac{1}{2}$ column.
- COST OF STAMP-MILLING IN THE BLACK HILLS, SOUTH DAKOTA.** T. A. I. M. E., vol. 25, p. 920.
- COST OF MILLING IN 1887-'88 AT HOMESTEAK AND GOLDEN STAR MILLS.** T. A. I. M. E., vol. 17, p. 540.
- COST OF ORE TREATMENT, WESTERN AUSTRALIA:** Concentration and Cyaniding. Min. & Sci. Press, vol. 93, p. 688. Tables.

- COST OF MILLING OF TELLURIDE ORES, KALGOORLIE, AUSTRALIA. Min. & Sci. Press, vol. 90, p. 205. Tables.
- COST OF MILLING AND REDUCTION, OROYA-BROWNELL, KALGOORLIE. Min. & Sci. Press, vol. 91, p. 384. Table.
- COST OF MILLING IN WESTERN AUSTRALIA. Gold Min. & Mill., W. Aus., pp. 195, 197, 212.
- GENERAL WORKING COST IN NEW SOUTH WALES. Milling Costs. T. I. M. & M., vol. 7, pp. 149, 150, 152. Tables.
- MILLING AND GENERAL COST OF TREATING BROKEN HILL ORES, NEW SOUTH WALES. E. & M. J., vol. 87, p. 940. Tables.
- COST OF OPERATIONS AT MACTEAR. SOUTH GERMAN MINES, MALDEN, VICTORIA. Mining and Milling. T. I. M. & M., vol. 6, p. 46.
- METHODS AND COST OF MILLING GOLD ORES IN QUEENSLAND. T. I. M. E., vol. 21, pp. 396, 399, 400. Table.
- COST OF MILLING MAHONEY MILL, CALIFORNIA. Min. & Sci. Press, vol. 82, p. 6. Table.
- COST OF MILLING IN CALIFORNIA. Min. & Sci. Press, vol. 73, p. 276.
- COST OF MILLING, GRASS VALLEY, CALIFORNIA, NORTH STAR MINE. T. I. M. & M., vol. 5, p. 156.
- COST OF TREATMENT AT YMIR, NELSON, BRITISH COLUMBIA. Min. & Sci. Press, vol. 92, p. 202. Table.
- COST OF OPERATING IN THE SLOCAN MILLS. J. C. M. I., vol. 6, p. 159.
- MILLING COSTS OF GILPIN COMPANY, COLORADO (1892). E. & M. J., vol. 54, p. 245, etc.
- COST OF MILLING TELLURIDE ORES IN WESTERN AUSTRALIA. Min. & Sci. Press, vol. 82, p. 158. Table.
- MILLING COSTS AT THE GOLDEN CYCLE CONCENTRATOR. M. & M., vol. 30, p. 673. 1½ columns.
- MILLING COSTS AT THE ALICE MINE, COLORADO. M. & M., vol. 29, p. 296. ½ column.
- FREIGHT AND TREATMENT CHARGES ON CRIPPLE CREEK ORE. E. & M. J., vol. 78, p. 1022. Table.
- See also COST OF TRANSPORTATION.
- MILLING COSTS AT CRIPPLE CREEK. E. & M. J., vol. 87, p. 957. 1½ columns.
- COST OF TREATMENT OF GOLD ORES IN MILLS HAVING CAPACITIES OF 3,000 TONS PER MONTH, CRIPPLE CREEK, COLORADO. T. I. M. & M., vol. 8, p. 82.
- SCALE OF CHARGES IN CYANIDING AND CHLORINATION PLANTS, CRIPPLE CREEK, COLORADO. T. I. M. & M., vol. 8, p. 90.
- CHARACTER OF ORE, COST OF TREATMENT AND FREIGHT RATES AT WILSON, COLORADO. Sch. Mines Quart., vol. 20, p. 46.
- APPROXIMATE COST OF GOLD MILLING IN COLORADO, IN 1898. Engineering, London, vol. 66, pp. 6, 223. Tables.
- COST OF MILLING ARGENTIFEROUS GALENA IN NORTHERN IDAHO. Ore Dressing, Richards, vol. 2, p. 1130. Table.
- COST OF STAMP-MILLING IN IDAHO. Ore Dressing, Richards, vol. 2, p. 1133. Table.
- COST OF MILLING AT THE ALASKA-TREADWELL. Ore Dressing, Richards, vol. 2, p. 1133. Table.
- MILLING COSTS AT UNSAN, KOREA. Min. & Sci. Press, vol. 100, p. 606. Table.
- COST OF ORE TREATMENT IN MEXICO. Min. & Sci. Press, vol. 84, p. 66. Table.
- COST OF TREATMENT OF GOLD AND SILVER ORES AT GUANAJUATO, MEXICO. Min. & Sci. Press, vol. 81, p. 5. Tables.
- COST OF MILLING SILVER-GOLD ORES AT THE PALMAREJO MINE, MEXICO.

- T. A. I. M. E., vol. 36, p. 264. Table.
- COST OF TREATMENT OF TON OF ORE IN THE MONTEZUMA DISTRICT, MEXICO. E & M. J., vol. 79, p. 1008 Table
- MILLING COSTS ON GOLD AND SILVER ORES AT TAJO ROSARIO, MEXICO. T. A. I. M. E., vol. 41, p. 338, table; p. 367, table.
- COST OF MILLS AND EQUIPMENT, BLACK HILLS, MEXICO. T. F. I. M. E., vol. 7, p. 107.
- ANALYSIS OF MILLING COSTS PER TON OF PULP AND ORE TREATED AT ELKHORN MINE, MONTANA. U. S. G. S., 22 Ann. Rept., pt 2, p. 417. Tables.
- COST OF MILLING ORE IN MONTANA. Min. & Sci. Press, vol 55, p. 149. Table.
- COST OF MILLING AT THE ELKHORN MINING COMPANY MILL. E. & M. J., vol. 51, p. 473. Table.
- COST OF MILLING, MONTANA. T. A. I. M. E., vol. 18, p. 248.
- COST OF ORE TREATMENT OF THE COMBINATION MINE. Min. & Sci. Press, vol. 93, p. 454 Tables
- COST OF ORE TREATMENT AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol 29, p. 572. Tables.
- THE COST OF MILLING SILVER ORES IN UTAH AND NEVADA. By R. P. Rothwell. T. A. I. M. E., vol. 8, p. 551
- COST OF EXTRACTION PER TON APART FROM GENERAL EXPENSES, CABEZAS DEL PASTO MINE, SPAIN, 1890. T. A. I. M. E., vol. 21, p. 100.
- COST OF AMALGAMATING GOLD ORES. E & M. J., vol. 38, p. 140.
- MILLING: Amalgamation, etc, in California. Min. & Sci. Press, vol. 19, p. 24. Table.
- COST OF AMALGAMATING ORES IN UTAH AND NEVADA. Min. & Sci. Press, vol. 42, p. 274, 1½ columns: p. 306, 1½ columns.
- COST OF AMALGAMATION AND OTHER WET PROCESSES IN MEXICO FOR SILVER ORES. T. I. M. & M., vol. 13, p. 115. Table.
- COMPARATIVE COSTS OF AMALGAMATION, CANVAS TABLES, AND CYANIDING GOLD ORES. Min & Sci. Press, vol. 84, p. 48. Table
- See also AMALGAMATION OF GOLD AND SILVER.
- COST OF THE REESE RIVER PROCESS OF AMALGAMATING. E & M J., vol. 11, p. 26 Table
- COST OF THE PATIO PROCESS. Min. & Sci. Press, vol. 94, p. 825. Table.
- COST OF PATIO PROCESS AT SAN DIMAS. E. & M. J., vol. 34, p. 294. Table.
- COST OF PATIO PROCESS. T. A. I. M. E., vol. 11, pp. 76, 77.
- COST OF PATIO PROCESS. T. A. I. M. E., vol. 13, p. 370.
- See also THE PATIO PROCESS OF AMALGAMATION.
- COST OF CYANIDING AT MERCUR, UTAH. E. & M. J., vol 54, p. 441. Table.
- COST OF MILLING AND CYANIDING IN THE TRANSVAAL. Min. Mag., vol. 11, p. 451. Table.
- COST OF FILTER PRESSING ON THE RAND. Min. Mag., vol 12, p. 186.
- COST OF SLIME TREATMENT AT THE TAJO, ROSARIO CYANIDE PLANT, MEXICO. T. A. I. M. E., vol. 41, pp. 352, 354 and 357. Table.
- See also SLIMES AND THEIR TREATMENT.
- DETAILED COST OF RUSSELL'S LIXIVIATION PROCESS. E & M. J., vol. 39, p. 438. 1 column
- COST OF MILLING AND CYANIDING AT PALMAREJO. E. & M. J., vol. 80, p. 340.
- See also CYANIDING GOLD, and COST OF CYANIDING.
- COST OF PLANT FOR TREATING BLACK SANDS FOR IRON AND STEEL. P. C. M. & M., Soc. S. A., vol. 7, p. 418. ½ column.

COST OF MILLING IN THE JOPLIN REGION M. & M., vol. 28, p. 154 $\frac{1}{2}$ column.

COST OF DRESSING LEAD ORE AT BONNE TERRE, MISSOURI T. A. I. M. E., vol. 17, p. 676.

PRICE OF CŒUR D'ALENE CONCENTRATES: Freight and Smelting Charges E. & M. J., vol. 48, p. 449, 1 column; p. 493, $\frac{1}{2}$ column, p. 520, $\frac{1}{2}$ column, p. 541, 1 column.

MILLING COST AT THE PIERREFFITTE MINE, FRANCE T. A. I. M. E., vol. 39, p. 390 1 page Table.

MILLING AND LABOR COSTS IN SOUTHWEST WISCONSIN. E. & M. J., vol. 81, p. 1141, etc. Tables.

COST OF CONCENTRATION AT GALENA, KANSAS: Wear of Crusher Jaws, Rolls, Shells, Elevator Buckets, Centrifugal Pumps, Screens, and Rubber Belting Univ. Geol. Sur. of Kans., vol. 8, p. 351. 6 pages.

COST OF MILLING IN THE JOPLIN DISTRICT. Ore Dressing, Richards, vol. 2, p. 1129. 1 page.

COST OF MILLING IN JOPLIN DISTRICT. M. & M., vol. 18, pp. 482, 483.

COST OF TREATING ORES AT ALMADEN Min. & Sci. Press, vol. 37, p. 392. 2 columns; p. 408, $1\frac{1}{2}$ columns.

THE COST OF MAKING NICKEL FROM NEW CALEDONIA ORES E. & M. J., vol. 77, p. 727 $1\frac{1}{2}$ columns

COST OF EVAPORATING SALT FROM BRINES. E. & M. J., vol. 80, p. 532

See also SALT MAKING

COST OF DRESSING TIN ORE AT MOUNT BISCHOFF, TASMANIA. T. I. M. & M., vol. 14, p. 227. Table

COST OF WASHING TIN ORE BY ROTARY PAN METHOD. P. C. M. & M. Soc. S. A., vol. 8, p. 177. Table.

COST OF TIN ORE DRESSING IN CORNWALL. E. & M. J., vol. 40, p. 416. 2 columns.

COST OF TREATING ORE AT SASATAGANI MINE, JAPAN. M. & M., vol. 18, pp. 105, 106.

COST OF ORE DRESSING IN SAXONY. Sch. Mines. Quart., vol. 15, p. 134. 1 page.

See also CONCENTRATION, and COST OF MINING AND TREATMENT.

Cost of Operating Elevators and Conveyors

FIRST COST OF CONVEYORS AND COST OF MAINTENANCE OF SAME. The Mechanical Handling of Material, p. 92. Table

COST OF LOADING VESSELS BY RIGG'S ELEVATOR. The Mechanical Handling of Material, p. 267.

COST OF LOADING VESSELS BY WALL'S DEVICE. The Mechanical Handling of Material, p. 363.

COST OF ELEVATING ORE BY BUCKET ELEVATOR, CARTHAGE, MISSOURI Min. & Sci. Press, vol. 93, p. 76.

COST OF CONSTRUCTION AND OPERATION OF SHAKING SHUTE FOR CONVEYING ORE IN MINES, TRANSVAAL, SOUTH AFRICA. Min. Mag., vol. 12, p. 277. Table.

COST AND POWER REQUIRED TO OPERATE A BELT ELEVATOR E. & M. J., vol. 76, p. 236.

See also ELEVATORS

Cost of Ores and Metals

DETERMINATION OF COST OF ORE. T. L. S. M. I., vol. 6, p. 15

PRICE PAID FOR ORE (GOLD) ACCORDING TO ASSAY VALUE. Min. & Sci. Press, vol. 27, p. 409. Table.

VALUE OF ORES AND ROYALTY PAID, GEM LODGE, IDAHO SPRINGS. M. & M., vol. 27, p. 72. Table.

ORE PRICES IN COLORADO. Min. & Sci. Press, vol. 19, p. 306.

COST OF IRON ORES AT DULUTH. T. A. I. M. E., vol. 16, p. 199.

LAKE SUPERIOR IRON-ORE PRICES. E. & M. J., vol. 84, p. 1110. $1\frac{1}{2}$ columns.

PRICES PAID FOR SILVER-LEAD ORES.
Min. & Sci. Press, vol. 87, p. 222.
 $\frac{1}{2}$ column.

ZINC-LEAD ORES IN COLORADO, MARKET AND PENALTIES. Min. & Sci. Press, vol. 77, p. 304. $\frac{1}{2}$ column.

COST OF RARE METALS PER POUND.
M. & M., vol. 19, p. 382. Table.

THE PRICE OF PLATINUM. E. & M. J., vol. 82, p. 745. $1\frac{1}{2}$ columns.

PRICE AND COSTS OF MALAY TIN ORES.
Tin Deposits of the World, p. 60.

See also VALUE OF ORE AND ITS DETERMINATION.

Cost of Packing and Portage

COST OF HAULING AND PACKING SUPPLIES FOR THE PLACER MINES IN BOISE BASIN, IDAHO. E. & M. J., vol. 68, p. 395.

FREIGHTING FROM MINE TO RAILROAD, IDAHO. M. & M., vol. 22, p. 204. Table.

COST OF PACKING BY MULES, DONKEYS AND LLAMAS IN BOLIVIA. T. I. M. & M., vol. 7, p. 87. Table.

COST OF PACKING ORE ON HORSE-BACK.
E. & M. J., vol. 76, p. 817.

COST OF PACKING THE FIRST OF THE ORE PRODUCED IN ASPEN, COLORADO: Which was done by "Burrows" or "Jacks." T. A. I. M. E., vol. 17, p. 159.

For other FREIGHT RATES see same reference.

COST OF PACKING BY MULES, DONKEYS AND LLAMAS, BOLIVIA, SOUTH AMERICA. Tin Deposits of the World, p. 121. Table.

COST OF MULE HAULAGE Miner's Pocket Book, Lock, p. 282. Table.

See also PORTAGE, PACKING AND FLUMING.

Cost of Pipe and Pipe Laying

COST OF LAYING WOOD PIPE. E. & M. J., vol. 84, p. 15. $\frac{1}{2}$ column.

COST OF WOODEN AND STEEL PIPES AND FLUMES. Min. & Sci. Press, vol. 89, p. 176. Tables.

COST OF LAYING A SUBMERGED CAST IRON PIPE. Eng.-Cont., vol. 27, p. 61. $1\frac{1}{2}$ columns. I

COMPARATIVE COST OF CAST IRON AND STEEL PIPE Min. & Sci. Press, vol. 72, p. 421. $\frac{1}{2}$ column.

COST OF PIPE LINE CONSTRUCTION.
E. & M. J., vol. 76, p. 541.

PRICES OF WROUGHT-IRON LAP-WELDED, STEEL-SOCKETED TUBES. Well-Boring, C. Isler, p. 65. Table.

COST OF PIPE (WATER) IN WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., pp. 139, 140.

COST OF LAYING LARGE SLIP-JOINT PIPE FOR HYDRAULICING IN COLORADO. Min. & Sci. Press, vol. 93, p. 688. Table.

See also HYDRAULIC MINING

COST OF 5-, 2 $\frac{1}{2}$ - AND 1 $\frac{1}{2}$ -INCH IRON PIPE (FOR AIR SERVICE). T. A. I. M. E., Albany Meeting, Feb., 1903, p. 4. Table

COST OF PIPES (PIPING) ON THE RAND, 1902. Witwatersrand Gold-fields, p. 458. Table.

COST OF 4-INCH FLANGED WROUGHT IRON PIPE M. & M., vol. 25, p. 544. Table.

COST, LIFE, AND CAPACITY OF CONSPICUOUS TYPES OF PRESSURE PIPES. Columbia Engineer, 1898-'99, p. 117. Table.

COST OF IRON-PIPE AND WOODEN-BOX CULVERTS. R. R. Construction, Webb, p. 400. Table.

COST OF THAWING WATER PIPES BY ELECTRICITY. Eng.-Cont., vol. 27, p. 125.

See also PIPES AND PIPE FITTINGS, and COST OF EXCAVATING.

Cost of Power

COST OF AN INDICATED HORSE-POWER. Min. & Sci. Press, vol. 69, p. 137. $\frac{1}{2}$ column.

94 COST OF MINING, MILLING, METALLURGY, ETC.

- COST OF POWER IN CALIFORNIA.** Min. & Sci. Press, vol 91, p. 441. 1 column.
- COST OF SMALL POWER PLANTS.** E. & M. J., vol 76, p. 360.
- THE COST OF POWER.** E. & M. J., vol 71, p. 716.
- MAN POWER AND ITS COST.** Min. & Sci. Press, vol. 84, p. 18. $\frac{1}{2}$ column.
- COST OF POWER AS RELATED TO LOAD FACTOR.** J. W. Soc E., vol. 14, p 241. 21 $\frac{1}{2}$ pages D.
- THE COST OF POWER** J C M. & M., Soc. S. A., vol. 7, p. 314. 1 column.
- COST OF POWER PER HORSE-POWER DAY.** Min & Sci. Press, vol. 101, p. 615. Note.
- POWER COST AT THE ELY MILL, NEVADA.** M & M, vol 29, p. 172. Table.
- POWER COST IN RAND MINES.** E. & M. J., vol. 85, p. 548. 3 columns.
- ECONOMY BY SUBDIVISION IN INSTALLATION AND OPERATION OF POWER AND MACHINERY UNDER VARYING DEMANDS: LOSS Resulting from Working Machines at Under Capacity.** By J. L. Horng. E. & M. J., vol 36, p. 16 1 column.
- COST OF POWER: Factors to be Considered.** Min. & Sci. Press, vol. 89, p. 51. $\frac{1}{2}$ column.
- COST PER HORSE-POWER PER YEAR.** E. & M. J., vol. 69, p. 324.
- COST OF POWER IN A LARGE STORE BUILDING IN PITTSBURG.** P. E. Soc. W. Pa., vol. 11, p. 330. 2 pages.
- MEMORANDA RELATING TO THE BOILER ACCOUNT AS KEPT DURING THE CONSTRUCTION OF THE EDGAR THOMSON STEEL WORKS.** By P Barnes. T. A. I. M., E., vol 6, p. 525.
- FIRST COST OF POWER PLANT FOR 300-TON MILL, JOPLIN DISTRICT** E. & M. J., vol. 86, p. 328. Table.
- LOW COST OF STEAM POWER IN NEW ENGLAND.** Min. & Sci. Press, vol. 75, p. 364. 1 column.
- COST OF STEAM HORSE-POWER PER ANNUM IN THE WEST.** E. & M J., vol. 82, p. 212
- See also STEAM BOILERS AND POWER PLANTS.
- COST OF STEAM-POWER.** Kent's Mech. Engr's Pocket Book, p. 790. Table.
- DECREASING COST OF STEAM PRODUCTION** M. & M., vol 18, p. 333. $\frac{1}{2}$ column
- COST OF STEAM AT PORTLAND MINE.** T. A. I. M. E., Feb., 1906, p 1304. Table
- SAVING IN COST BY THE UTILIZATION OF EXHAUST STEAM.** T. I. M. E., vol 24, p 339.
- COST OF FIRING BOILERS WITH AND WITHOUT MECHANICAL DRAFT.** Columbia Eng., 1898-'99, pp 30, 31, 33, 34, 35.
- MECHANICAL vs. HAND STOKING COSTS** Min. & Sci. Press, vol. 88, p. 181. $\frac{1}{2}$ column. Table.
- See also MECHANICAL FEEDERS FOR STEAM BOILERS
- COST OF STEAM RAISING** By J. Holliday. Engineering, London, vol 68, p. 739. 4 columns.
- COST OF STEAM AT THE PORTLAND MINE, COLORADO.** T. A. I. M. E., vol. 37, p 96. Table.
- COST OF POWER GENERATION: Comparative Costs by Steam, Water and Gas Engines.** By J B C. Kershaw. Engineering, London, vol. 70, pp. 351, 390. 3 columns
- COST AND SAVING OF STEAM PIPE COVERINGS.** E. & M. J., vol. 81, p. 572
- COMPARATIVE COST OF STEAM AND WATER POWER.** E & M. J., vol. 47, p. 502 2 $\frac{1}{2}$ columns.
- RELATIVE COST OF WATER AND STEAM POWER.** Min. & Sci. Press, vol. 30, p. 35. $\frac{1}{2}$ column.
- COST OF WATER HORSE POWER PER YEAR.** Min. & Sci. Press, vol 83, p. 181
- COST OF RUNNING ELECTRIC-PLANT.** T. A. I. M. E., vol. 20, p. 366.

- COST OF ELECTRICAL POWER PER TON IN THE BLACK HILLS. Min. & Sci. Press, vol. 92, p. 53. $\frac{1}{2}$ column.
- COST OF GENERATING STATIONS COMPLETE. Engineering, London, vol. 77, p. 773. Table.
- COST OF ELECTRIC MOTORS VS. STEAM ENGINES. E. & M. J., vol. 50, p. 160. 1 column.
- COST OF ELECTRICAL POWER IN UNITED STATES AND CANADA. California Miners' Assoc, Ann., 1906, p. 53. $\frac{1}{2}$ page.
- COST OF ELECTRICITY PER KILOWATT HOUR. California Miners' Assoc, Ann., p. 109.
- COST OF AN ELECTRICAL INSTALLATION IN A COLLIERY: English Practice. T. F. I. M. E., vol. 7, p. 129. Table.
- COST OF ELECTRIC POWER AT GOLDFIELD, NEVADA. E. & M. J., vol. 82, p. 342. Table.
- COST OF ELECTRICITY PER KILOWATT HOUR. Min. Mag., vol. 12, p. 369. Table.
- COST OF ELECTRIC POWER. By Louis Ball. Electrochemical Industry, Aug., 1904. $1\frac{1}{2}$ columns.
Min. Mag., Oct.-Nov., 1904, p. 297.
- POWER COSTS: Electricity, Steam, Gas, etc. Min. & Sci. Press, vol. 93, p. 757. $\frac{1}{2}$ column.
- COST OF ELECTRIC POWER AT JOPLIN. E. & M. J., vol. 80, p. 64. $\frac{1}{2}$ column.
- COST OF AN ELECTRICAL UNIT AT A COLLIERY. By P. C. Greaves. T. I. M. E., vol. 32, p. 363. 22 pages.
- COST OF ELECTRICITY AT VIRGINIA CITY, NEVADA. E. & M. J., vol. 76, p. 851.
- COST OF ELECTRIC POWER, SILVER LAKE, COLORADO. E. & M. J., vol. 76, p. 307.
- COMPARATIVE COSTS OF ELECTRICAL POWER. Min. & Sci. Press, vol. 81, p. 402. Table.
- COST OF ELECTRIC VS. WATER POWER. Min. & Sci. Press, vol. 74, p. 233. Table.
- COST OF ELECTRICAL POWER PLANT. E. & M. J., vol. 74, p. 743. $\frac{1}{2}$ column.
- COST OF ELECTRIC PLANT OPERATION, PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Feb., 1906, p. 1305. Table.
- COST OF ELECTRICAL POWER: Smugler-Union. E. & M. J., vol. 76, p. 118.
- COST OF A HORSE POWER HOUR IN DIFFERENT SORTS OF MOTORS. Min. & Sci. Press, vol. 82, p. 94.
- COST OF ELECTRIC POWER, RAND MINES. E. & M. J., vol. 85, p. 550. 3 columns.
- SYSTEMS OF CHARGING FOR ELECTRICAL ENERGY. By W. T. Ryan. Min. & Sci. Press, vol. 98, p. 694. $3\frac{1}{2}$ columns.
- COST OF ELECTRIC POWER. Min. & Sci. Press, vol. 85, p. 217.
- COST OF ELECTRIC POWER. E. & M. J., vol. 80, p. 640. $\frac{3}{4}$ columns.
- COMPARATIVE COST OF PLANTS PER HORSE POWER TRANSMITTED. Electricity, Hydraulic, Pneumatic and Wire Rope. Miners' Pocket Book, Lock, pp. 120, 121, 294 and 295. Tables.
- COST OF ELECTRICAL INSTALLATION COMPARED WITH STEAM. E. & M. J., vol. 80, p. 357.
- COST OF ELECTRICAL POWER IN COLLIERIES. Coll. Eng., vol. 8, p. 225. Tables.
- COST OF ELECTRICAL TRANSMISSION. T. F. I. M. E., vol. 8, p. 256.
- COST OF WIRES FOR ELECTRICAL TRANSMISSION. E. & M. J., vol. 69, p. 81.
- COST OF COMPLETE ELECTRIC PLANT FOR TRANSMISSION OF POWER VARIOUS DISTANCES. T. A. I. M. E., vol. 16, p. 854.

COST OF AN ELECTRICAL PLANT TO TRANSMIT 100 HORSE POWER FIVE MILES. T. F. I. M. E., vol 3, p. 288 Table

See also THE ELECTRIC POWER PLANT AND ITS EQUIPMENT.

COST OF ELECTRICAL TRANSMISSION. Miners' Pocket Book, Lock, pp. 110, 111, 113. Table

See also POWER TRANSMISSION, ETC

RELATIVE COSTS OF TRANSMISSION OF POWER. Min. & Sci. Press, vol. 61, p. 72. $\frac{1}{2}$ column

COST OF AN 18 $\frac{1}{2}$, 13 $\frac{1}{2}$ AND 6 $\frac{1}{2}$ INCH THREE-STAGE AIR COMPRESSOR, NORWALK, STRAIGHT-LINE T. A. I. M. E. Feb., 1903, p. 4. Table.

SAVING IN COST BY INTRODUCING CENTRAL COMPRESSED AIR PLANT M. & M., vol. 25, p. 161. $\frac{1}{2}$ column.

COST OF COMPRESSING AIR, PORTLAND MINE. T. A. I. M. E., Feb., 1906, p. 1305. Table.

COST OF AIR COMPRESSION. E. & M. J., vol. 59, p. 101

COST OF ELECTRICITY VS. COMPRESSED AIR. E. & M. J., vol. 75, p. 669. Table.

COST OF COMPRESSED AIR HAULAGE PLANT. M. & M., vol. 25, p. 569. $\frac{1}{2}$ column.

COST OF COMPRESSED AIR IN TERMS OF INDICATED HORSE POWER. T. N. S. I. M. & M. E., vol 9, p 51. Table.

COST OF CONSTRUCTION OF A COMPRESSED AIR POWER STATION. P. E. Soc. W. Pa., vol. 13, p. 188. Table.

COST OF OPERATING A COMPRESSED AIR MOTOR, AS COMPARED WITH MULE HAULAGE. M & M., Sept. 1903, p. 77.

COST OF POWER FOR OPERATING VARIOUS FORMS OF AIR COMPRESSORS. M. & M., vol 27, p. 102. Table.

COST OF VARIOUS FORMS OF AIR COMPRESSORS M. & M., vol. 27, p. 102 Table.

COST OF COMPRESSED AIR, PORTLAND MINE, COLORADO. T. A. I. M. E., vol 37, p 97 Table

MACHINE AIR COST ON THE RAND. P. C. M & M Soc S. A., vol 10, p. 280. 1 column.

COST OF VARIOUS FORMS OF COMPRESSED AIR INSTALLATIONS. E & M J., vol 86, p. 229. 1 $\frac{1}{2}$ columns.

COMPARATIVE COSTS OF COMPRESSING AIR WITH STEAM AND ELECTRICITY AT ROSSLAND, BRITISH COLUMBIA. By Wm Thompson. J. C. M. I., vol 6, p. 180. 8 pages.

COST OF COMPRESSED AIR VS. HYDRAULIC POWER T. N. S. I. M. & M. E., vol. 9, p 330. Table.

THE COST OF LEAKAGE IN COMPRESSED AIR PLANTS. J. C. M. & M Soc. S. A., vol. 7, p. 308 1 column.

See also COMPRESSED AIR IN MINING.

COST OF LIQUID AIR. E. & M. J., vol 81, p. 284.

COST OF OPERATING GAS ENGINES. Min. & Sci. Press, vol. 82, p. 292

RELATIVE COSTS OF GAS AND STEAM PLANTS Min. & Sci. Press, vol. 89, p. 327. Table.

COST OF GAS POWER. By C. E. Lucke. Sch. Mines Quart., vol 30, p 199. 18 pages.

COST OF MANUFACTURE OF ILLINOIS GAS E & M. J., vol. 76, p 507

COST OF GASOLINE PUMP FOR IRRIGATION OR MINE USE. E. & M J., vol. 80, p. 296.

COST OF AN OIL-ENGINE FOR UNDERGROUND USE. T. I. M. E., vol. 18, p. 399.

COST OF PRIESTMAN OIL ENGINE PER HOUR. T. F. I. M. E., vol. 3, p. 262. Table

See also POWER, ETC, and GAS AND OIL ENGINES.

Cost of Producing Various Materials

PERCENTAGE SUBDIVISION OF COST OF PRODUCING MINERAL: Cost per Ton; Mining Plant, etc; Labor, Supplies, etc, Timber, Maintaining Workings etc, Milling, etc; and Management, etc. T. A. I. M. E., California Mines and Minerals, p. 64.

COST OF PRODUCTION OF TRINIDAD ASPHALT. Min. & Sci. Press, vol. 66, p. 262.

COST OF PRODUCING CHINA CLAY. E. & M. J., vol. 79, p. 1080.

COST OF PRODUCTION AND PROFITS PER TON COAL, BELGIUM. E. & M. J., vol. 74, p. 706.

COST OF MINING ANTHRACITE COAL. E. & M. J., vol. 77, p. 592. 1 column.

See also THE COAL TRADE.

COST OF PRODUCING COPPER PER TON. E. & M. J., vol. 30, p. 108. Table.

COST OF PRODUCING COPPER AT CALUMET AND HECLA MINES. E. & M. J., vol. 40, p. 420. 2 columns.

COST OF PRODUCING LAKE COPPER. Min. & Sci. Press, vol. 83, p. 75.

COST OF CANANEA COPPER. Min. & Sci. Press, vol. 83, p. 86.

COST OF COPPER AT ATLANTIC MINE. Min. & Sci. Press, vol. 83, p. 86.

REASON FOR DIFFERENCE IN COST IN LAKE SUPERIOR. Min. & Sci. Press, vol. 83, p. 118.

COST OF PRODUCING A TON OF COPPER. M. & M., vol. 28, p. 526. $\frac{1}{2}$ column.

THE COST OF PRODUCING COPPER IN ARIZONA. By J. R. Finlay. E. & M. J., vol. 86, p. 37. $5\frac{1}{2}$ columns. I.

COSTS AND PROFITS OF PRODUCTION OF ARIZONA COPPER. Min. & Sci. Press, vol. 43, p. 134. $1\frac{1}{2}$ columns.

COST OF PRODUCING COPPER. E. & M. J., vol. 86, p. 76. 2 columns.

COST OF PRODUCING THE WORLD'S SUPPLY OF COPPER. By J. R. Finlay. E. & M. J., vol. 86, p. 165. $9\frac{1}{2}$ columns.

OFFICIAL REPORTS OF COSTS OF PRODUCING COPPER. By A. R. Townsend. E. & M. J., vol. 86, p. 555. 11 columns.

See also THE COPPER TRADE.

COST OF ORE-PRODUCTION IN SOUTH AFRICA. E. & M. J., vol. 76, p. 121.

COST OF GOLD PRODUCTION. E. & M. J., vol. 61, p. 395. $1\frac{1}{2}$ columns.

WHAT IS THE COST OF PRODUCING GOLD AND SILVER? E. & M. J., vol. 51, p. 437. $\frac{1}{2}$ column.

COST OF PRODUCTION IN THE REPUBLIC DISTRICT, WASHINGTON. E. & M. J., vol. 74, p. 74.

See also THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING.

COST OF PRODUCING OLD RANGE IRON (BESSEMER) ORES. E. & M. J., vol. 83, p. 717.

COST OF PRODUCTION OF IRON. T. A. I. M. E., vol. 17, p. 123.

COST OF PRODUCTION OF ORE (IRON) IN LAKE SUPERIOR REGION. M. & M., vol. 19, p. 413.

See also THE IRON TRADE.

COST OF PRODUCING BRAZILIAN MICA. T. I. M. & M., vol. 12, p. 357. Table.

COST OF PRODUCTION OF LOW-GRADE PHOSPHATE-ORES, CANADA. T. A. I. M. E., vol. 21, pp. 179, 183, 184, 185.

COSTS AND PROFITS IN SILVER-LEAD ORE PRODUCTION. By J. R. Finlay. E. & M. J., vol. 85, p. 1279. 11 columns.

THE COST OF PRODUCING SILVER. E. & M. J., vol. 55, p. 146. $1\frac{1}{2}$ columns.

THE COST OF PRODUCING SILVER. Min. & Sci. Press, vol. 66, p. 114. 1 column.

THE COST OF SILVER Min. & Sci. Press, vol 66, p 166 1 column.

THE PRICE OF SILVER Min. & Sci. Press, vol 66, p 196 1½ columns.

COST OF PRODUCTION OF SILVER. Min. & Sci. Press, vol 67, p 34. 1 column

WHERE SILVER IS PRODUCED AT A COST OF 23 CENTS PER OUNCE. Min. & Sci. Press, vol 77, p 451 ½ column

See THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING.

COST OF SULPHUR PRODUCTION IN SICILY. E. & M. J., vol. 20, p. 408.

Cost of Preserving Mine Timber

COST OF PRESERVING TIMBERS BY VARIOUS METHODS R R Construction, Webb, p. 229 2 pages.

COST OF TREATMENT OF TIMBER FOR USE IN MINES T. F. I. M. E., vol. 10, p 533.

PROTECTING STEEL FROM CORROSION. By R. B. Woodworth Min. & Sci. Press, vol. 99, p 560. 1½ columns.

See also PRESERVATION OF MINE TIMBER.

Cost of Prospecting

COST OF PROSPECTING WITH A KEYSTONE DRILL FOR COPPER IN NEVADA. E. & M. J., vol. 83, p. 804. ¾ column.

COST OF PROSPECTING WITH CHURN DRILL. Min. & Sci Press, vol. 93, p. 786. Table.

COST OF PROSPECTING IN ZINC FIELDS OF WISCONSIN. E. & M. J., vol. 81, p. 1233. 2 columns.

COST OF CHURN-DRILL PROSPECTING. E. & M. J., vol. 80, pp. 920, 921 and 922.

COST OF CHURN AND DIAMOND DRILLING IN MISSOURI. E. & M. J., vol. 80, p. 244.

COST OF DIAMOND DRILL PROSPECTING UNDERGROUND AT THE ESPERANZA MINE, EL ORO, MEXICO Min & Sci. Press, vol 99, p. 825. Table

COST OF PROSPECTING BY DIAMOND DRILL The Witwatersrand Goldfields, pp 147, 148.

COST OF TEST DRILLING ON MISABI RANGE E. & M J., vol. 75, p 896.

COST OF TEST DRILLING ON VERMILION IRON RANGE E. & M. J., vol. 75, p. 966.

COST OF PROSPECTING AURIFEROUS GRAVEL DEPOSITS BY DRILL. Min. & Sci. Press, vol. 80, p. 120.

COST OF PROSPECT DRILLING IN ALLUVIAL DEPOSITS AT OROVILLE, CALIFORNIA. T. I. M. & M., vol 12, p 459. Table.

See also COST OF DRILLING AND BORING

COST OF PROSPECTING FOR DREDGING. E. & M. J., vol. 85, p. 1087. ¾ column

See also PROSPECTING, ETC.

Cost of Pumping and Bailing

COMPARATIVE COST OF RAISING WATER BY DIFFERENT SYSTEMS IN THE TRANSVAAL T. I. M. & M., vol. 16, p 230. Table.

THE COST OF PUMPING AT THE SHORT MOUNTAIN COLLIERY OF THE LYKENS VALLEY COAL COMPANY. By R. V. Norris. T. I. M. E., vol. 34, p. 106

COST OF PUMPING PLANT AND RUNNING EXPENSES AT SIERRA MOJADA, MEXICO. T. A. I. M. E., vol 15, p. 570.

COST OF PUMPING AT LEADVILLE, COLORADO. Min. & Sci. Press, vol. 82, p. 282. Table.

COST OF PUMPING ON THE RAND. Witwatersrand Goldfields, p. 269

COST OF DAVEY DIFFERENTIAL PUMP AT THE C. & C. SHAFT, COMSTOCK LODGE, NEVADA. Min. & Sci. Press, vol. 90, p. 74.

COST OF PUMPING ON THE COMSTOCK
E. & M. J., vol. 82, p. 1210.

COST OF PUMPING WITH COMPRESSED AIR. T. F. C. M. I., vol. 2, p. 229.

See also COMPRESSED AIR PUMPING.

COST OF CORNISH PUMP WORK ON THE RAND. Gold Mines of the Rand, p. 172. Table, p. 259.

COST OF PUMPING AT GALENA, KANSAS:
Cornish and Steam Pump Work.
Univ. Geol. Sur. of Kans., vol. 8,
p. 346. 3 pages

See also CORNISH PUMPS.

COST OF PUMPING AT THE SHORT MOUNTAIN COLLIERY OF THE LYKENS VALLEY COAL COMPANY IN DAUPHIN COUNTY, PENNSYLVANIA. By R. V. Norris M & M., Vol. 23, p. 413. 3 columns.

COST OF PUMPING BY ELECTRICITY
E. & M. J., vol. 47, p. 545. Table

COST OF PUMPING BY STEAM PUMPS.
Miner's Pocket Book, Lock, pp 330,
331, 332. Table.

COST OF ELECTRICAL PUMP WORK.
Miner's Pocket Book, Lock, p. 333.
Table.

COST OF ELECTRIC PUMPING IN COLLIERIES Min. & Sci. Press, vol 56,
p. 135. $\frac{1}{2}$ column

COMPARATIVE COST OF ELECTRIC AND STEAM PUMPING Min & Sci. Press,
vol. 63, p. 2. 1 column.

See also ELECTRICALLY DRIVEN PUMPS,
and PUMPS FOR MINE USE.

EXPENSE OF PUMPING WATER BY WINDMILL. E. & M. J., vol. 33,
p. 260. Tables.

THE COST OF BAILING. Min. & Sci.
Press, vol. 90, p. 201. 2 columns.

COST OF PUMPING AND BAILING IN THE DEEP LEVEL MINES OF THE RAND.
M. & M., vol. 26, p. 475. Table.

COST OF WINDING WATER. T. F. I. M.
E., vol. 13, p. 81.

See also BAILING WATER, and PUMPS
FOR MINE USE.

Cost of Reduction

COST OF STAMP-MILLING. T. A. I. M.
E., vol. 23, p. 567.

COST OF STAMP MILLING. Min. & Sci.
Press, vol 81, p. 560. Table.

COST PER TON OF ROCK STAMPED.
Iron Ore. T. A. I. M. E., vol. 21,
pp. 548, 549.

ECONOMY IN AUTOMATIC ORE FEEDERS.
Min. & Sci Press, vol. 87, p. 19.

COST OF HAND VS. MACHINE FEEDING STAMP BATTERIES, GILPIN COUNTY, COLORADO. E. & M. J., vol. 54,
p. 246

COMPARATIVE COST OF STAMPS AND ROLLS T. I. M & M., vol 7, p. 141.
Tables.

COST OF STAMPING IN AUSTRALIA E.
& M. J., vol. 36, p. 182. $\frac{1}{2}$ column.

COST OF ERECTING A STAMP MILL—20 STAMPS, SOUTH AFRICA. Min. & Sci.
Press, vol. 90, p. 105 Table.

COMPARISON OF CURRENT COSTS PER TON OPERATING WITH 10 AND 20 STAMPS. Min & Sci. Press, vol. 76,
p 177. Table.

COST OF SHOES AND DIES OF DIFFERENT MATERIAL Min. & Sci Press,
vol. 89, p. 224.

COST AND WORKING-RESULTS OF SHOES AND DIES OF DIFFERENT MATERIALS.
T. A. I. M. E., vol 35, p. 594. Table.

See also STAMP MILL PRACTICE.

COST OF WEAR OF STAMPS AND ROLLS.
E. & M. J., vol. 37, p. 461.

COST OF WEAR OF ROLL SHELLS AND PULVERIZERS ON THE RAND. T. I.
M. & M., vol. 7, p 135. Table.

See also ROLLS: Construction and
Operation.

COST OF DRY CRUSHING Gold Min.
& Mill. W. Aus., p. 247.

COST OF DRY CRUSHING MILLS. J. C.
& M. Soc., S. A., vol. 1, p. 815.

COSTS OF DRY CRUSHING. Gold Min.
& Mill. W. Aus., pp. 245, 248. Table.

100 COST OF MINING, MILLING, METALLURGY, ETC.

COST OF MILL SPARES: Dies, Shoes, Cams, Cam-Shafts, Stems, etc Gold Min & Mill W Aus, p. 456. Table.

COST OF FINE GRINDING IN WESTERN AUSTRALIA By W Broodbridge. Min Mag, Feb, 1905, p. 175.

COST OF OPERATING HUNTINGTON MILL Gold Min & Mill W. Aus, pp. 220, 222. Tables

COST OF CRUSHING WITH BALL MILL. Gold Min. & Mill. W Aus., p. 247.

COST OF OPERATING TUBE MILLS ON GOLD ORES. Min. Mag., vol 11, pp. 411, 412, etc.

COST OF GRINDING BY TUBE-MILLS AT EL ORO, MEXICO. T. A. I. M. E., vol. 37, p. 23. 1 page Tables

COST OF TUBE MILL OPERATION P. C. M. & M Soc S. A., vol 8, p 12. 1 column

COST OF REDUCING BY TUBE-MILL. P. C. M & M. Soc S. A., vol. 6, p. 314. Note

COST OF TUBE MILL WORK AT THE COMBINATION MINE, GOLDFIELD, NEVADA. M. & M, vol. 27, pp. 298 and 299. $\frac{1}{2}$ column

COST OF TUBE-MILL LINING. Min & Sci. Press, vol. 93, p. 108. Table.

See also **FINE CRUSHING BY MILLS, ETC.**

COST OF CRUSHING, WESTERN AUSTRALIA. Gold Min. & Mill. W. Aus., p. 248.

COMMUNICATION ON THE COST OF CRUSHING HARD HEMATITES T. L. S. M. I., vol. 3, p. 93. 1 page.

See also **CRUSHERS, ETC.**

COST OF BREAKING ORE BY MACHINERY WITH A 100-TON CAPACITY PLANT E. & M. J., vol. 39, p. 296. Table.

COST OF REDUCTION OF ORE: Nevada and California Min. & Sci. Press, vol. 18, p. 345. Table.

COST OF REDUCTION OF GOLD-ZINC SLIMES. Min. & Sci. Press, vol. 75, p. 123. Table.

COST OF CRUSHING AND SEPARATING COPPER ORES AT THE ATLANTIC MINE, MICHIGAN E. & M. J., vol. 55, p. 53. $\frac{1}{2}$ column.

COST OF CRUSHING OXIDIZED ORE AT MOUNT MORGAN IN BALL MILLS AND ROLLS E. & M J., vol 74, p 50. Table

COST OF REDUCTION OF GOLD AND SILVER ORES Min. & Sci. Press, vol 30, p 414.

COST OF REDUCTION IN A SILVER-MILL. T A I M E, vol. 11, p. 100.

COST OF LOSS OF COAL BY BREAKAGE IN STORAGE BINS E. & M. J, vol. 84, p 645

See also **THE REDUCTION OF ORES, ETC.**

Cost of Rope

COST OF LANG'S LAY WINDING-ROPES. P. C. M & M. Soc S. A., vol. 7, p. 189. Table

COST OF WIRE ROPE FOR TON COAL HAULED. Second Geol. Sur. Pa., A. C., p. 261. Table.

See also **ROPES, CHAINS, COUPLINGS, ETC., and KINDS OF WIRE ROPES, ETC.**

Charges, Royalties, Taxes, etc.

MINT CHARGES Min & Sci. Press, vol. 90, p. 409 Table.

MINT CHARGES. E. & M. J., vol 38, p. 348. 2 columns

ROYALTIES PAID BY LEASES AT GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 90, p. 151.

CORNISH MINES AND THE ROYALTIES THEY PAY. Min. & Sci. Press, vol. 67, p. 86. $\frac{1}{2}$ column.

RATE OF ROYALTY IN THE DEEP ALLUVIAL WORKINGS OF AUSTRALIA. T. I. M. & M, vol. 7, p. 110.

ROYALTIES IN RHODESIA. Min. & Sci. Press, vol. 89, p. 255. $\frac{1}{2}$ column.

MEXICAN TAXATION ON BULLION: Costs and Charges. E. & M. J., vol. 75, p 410 1 column.

COST OF OBTAINING A MINING CONCESSION IN MEXICO. Min & Sci. Press, vol 88, p. 92.

See also RATING AND TAXATION.

Cost of Sampling

COST OF SAMPLING AT HAILEY, IDAHO. M & M., vol 22, p. 204 Table.

COST OF SAMPLING ORES BY MACHINES. T. A. I. M. E., vol 20, p. 440.

See also SAMPLING OF MINES.

Cost of Shaft Sinking

COST OF SHAFT SINKING. E. & M. J., vol. 83, p. 387. 1½ columns.

COST OF SHAFT-SINKING (CIRCULAR SHAFT). E. & M. J., vol 81, p. 1198

COST OF SINKING THROUGH MODERATELY HARD MATERIAL: In Coal Mines. M. & M., vol 24, p 144

COST OF SHAFT-SINKING WITH ROCK-DRILLS. T. F. I. M. E., vol 8, p 20

COST OF SINKING CIRCULAR SHAFT. T. I. M. E., vol 38, p. 28. Table

COST OF SHAFT-SINKING WITH SMALL MACHINES. Min & Sci. Press, vol. 93, p. 448. Table.

COST OF SHAFT-SINKING. Min. & Sci. Press, vol. 74, p. 416. ½ column.

RATE OF SHAFT SINKING AND COST. The Witwatersrand Goldfields, p. 189. 5 pages.

SPEED AND COST OF SINKING SHAFTS. Second Geol. Sur. Pa., A. C., p. 73. 1 page.

COST OF SINKING. E. & M. J., vol. 47, p. 11. Table.

ESTIMATED COST OF SINKING SHAFT. M. & M., vol. 30, p. 256. 2 columns.

COMPARATIVE COST OF SHAFT SINKING. Min & Sci. Press, vol. 88, p. 224. ½ column.

ESTIMATED COST OF SHAFT SINKING. P. C. M. & M. Soc. S. A., vol. 10, p 412. Tables.

COST OF SHAFT SINKING. M. & M., vol. 29, p 518. ½ column. Tables.

COST OF SINKING AN INCLINED SHAFT. M. & M., vol. 31, p. 728. Table

COST OF CEMENTATION IN SHAFT-SINKING. E. & M. J., vol 86, p. 222. Table.

COST OF SHAFT SINKING BY CEMENTATION AND FREEZING SYSTEMS. T. I. M. E., vol. 31, p. 122. Table.

COST OF SHAFT SINKING BY THE KIND-CHAUDRON METHOD, ENGLAND P. C. M., vol 2, pp. 201, 204, 205, 206. Tables.

RECORD AND COST OF SHAFT SINKING BY THE KIND-CHAUDRON METHOD. E & M. J., vol. 81, p. 862

COST OF SINKING DROP SHAFT THROUGH 35-FOOT STRATUM OF QUICKSAND. E. & M. J., vol. 81, p. 134. Table.

COST OF SINKING THROUGH LOOSE MATERIALS, EUROPE P. C. M., vol. 2, pp. 210, 212, 217. Tables.

COST BY FREEZING PROCESS. P. C. M., vol. 2, pp. 227, 228, 230.

COST OF SINKING THROUGH SAND AND GRAVEL BY USE OF TUBBINGS, ENGLAND. T. I. M. E., vol 38, p. 320. Table.

COST OF SINKING A SHAFT WITH IRON LININGS. E. & M. J., vol. 20, p. 574. Table.

See also SHAFT LINING, and COST OF SUPPORT.

COST OF A SINKING PLANT FOR A DEPTH OF 500 FEET. M. & M., vol. 29, p. 462. Table

COMPARATIVE COSTS OF HAND AND MACHINE WORK IN SHAFT SINKING ON THE RAND Witwatersrand Goldfields, pp. 194, 195, 196. Table.

See also COST OF DRILLING AND BORING.

- COST OF SHAFT SINKING ON THE RAND** T. N. S. I. M. & M. E., vol 10, p. 135.
- NOTE ON THE COST AND SPEED OF SINKING THE EAST SHAFT OF THE NEW KLEINFONTEIN COMPANY, BENONI, SOUTH AFRICA.** By E. J. Way. T. A. I. M. E., vol 35, p. 397. 2 pages.
- COST OF SHAFT SINKING ON THE RAND** T. I. M. & M., vol 15, pp. 345, 363 Tables.
- COST OF SHAFT SINKING ON THE RAND.** Witwatersrand Goldfields, pp. 189, 190, 191, 192, 193, 194. Tables.
- COST OF SHAFT SINKING AND DRIVING WINZES ON THE RAND** Gold Mines of the Rand, p. 259. 1 page.
- COST OF SHAFT SINKING IN SOUTH AFRICA.** Sch Mines Quart., vol 20, p. 382. 1½ pages.
- COST OF SHAFT SINKING ON THE RAND.** Min. & Sci. Press, vol. 87, p. 217. Table.
- COST OF SHAFT SINKING IN SOUTH AFRICA.** Eng. Cont., vol. 27, p. 125. ½ column.
- COST OF SHAFT SINKING, GEORGIA.** E. & M. J., vol. 61, p. 617.
- COST OF SINKING THE EAST SHAFT OF THE NEW KLEINFONTEIN COMPANY, LIMITED.** By E. J. Way T. I. M. & M., vol. 13, p. 102 10 pages
- VARIATION IN COST OF SINKING A 3900-FOOT SHAFT AT THE CINDERELLA DEEP.** E & M. J., vol. 82, p. 1060. Table.
- SPEED AND COST OF SHAFT SINKING IN WESTERN AUSTRALIA.** Gold Min. & Mill., W. Aus., p. 165. 3 pages.
- COST OF RAISING AND SINKING IN NEW SOUTH WALES.** T. I. M. & M., vol. 7, p. 151. Table.
- COST OF SHAFT SINKING AT THE VICTORIA MINE, BENDIGO, AUSTRALIA:** the Deepest Gold Mine in the World, 1906. Min. & Sci. Press, vol 93, p. 503. ½ column.
- COST OF SHAFT SINKING, SUTTER CREEK, CALIFORNIA.** Min. & Sci. Press, vol. 84, p. 35. Table.
- COST OF SHAFT SINKING, LINCOLN MINE, CALIFORNIA.** Min. & Sci. Press, vol. 86, p. 25. Table.
- COST OF SHAFT SINKING ON THE MOTHER LODE, CALIFORNIA.** Min. & Sci. Press, vol. 93, p. 683.
- COST AND RATE OF SHAFT SINKING ON THE MOTHER LODE, CALIFORNIA.** T. A. I. M. E., California Mines and Minerals, p. 166.
- COST OF SHAFT SINKING, CENTRE STAR MINE COMPANY, BRITISH COLUMBIA:** Including Compressed Air, Drill Fittings and Labor. Miner's Pocket Book, Lock, p. 178. Table.
- COST OF SHAFT SINKING:** Transvaal, South Africa Miner's Pocket Book, Lock, pp 208, 209, 210. Table.
- COST OF SINKING DOMINION No. 1 SHAFT.** J. M. Soc. N. S., vol. 3, p. 111. Table
- THE COST OF SINKING PLANT, SHAFT SINKING AND LEVEL DRIVING IN THE DEEPEST LODES YET REACHED IN THE GOLD MINES OF NOVA SCOTIA.** By W. L. Libbey. J. M. Soc. N. S., vol. 9, p. 94. 4 pages.
- COST OF SHAFT SINKING IN ENGLAND.** P. C. M., vol 1, pp. 136, 138, 141, 151, 152, 154. Tables.
- COST OF THE SINKING OF THE SHAFTS OF SAINTE MARIE AT PIRONNES.** T. A. I. M. E., vol 5, p. 128.
- COST OF A THREE-COMPARTMENT SHAFT AT FRISCO, IDAHO** Min. & Sci. Press, vol. 94, p. 272.
- COST OF SHAFT SINKING IN INDIA.** T. I. M. & M., vol 5, pp. 143 and 220.
- COST OF SHAFT SINKING AT GALENA, KANSAS.** Univ. Geol. Sur. of Kansas, vol. 8, p. 341. 1½ pages.
- COST OF SHAFT SINKING TIN MINES, MALAY PENINSULA.** T. I. M. & M., vol. 7, p. 14
- COST OF SHAFT SINKING IN THE TIN MINES OF THE MALAY PENINSULA.** Tin Deposits of the World, p. 58.

COST OF SHAFT SINKING AT THE EL ORO MINES, MEXICO Min & Sci. Press, vol. 100, p. 519. Tables

COST OF SINKING A MEXICAN SHAFT. M. & M., vol. 31, p. 275 $\frac{1}{2}$ column. Table

COST OF SHAFT SINKING: In an American Copper Mine Min & Sci Press, vol. 85, p. 9. Table.

COST OF SHAFT SINKING IN RANDOLPH COUNTY, MISSOURI. E. & M. J., vol. 86, p. 6. $1\frac{1}{2}$ columns

DIFFICULT SHAFT SINKING, EMMA MINE, BUTTE, MONTANA. Min. & Sci. Press, vol. 84, p. 77. $\frac{1}{2}$ column.

COST OF SHAFT SINKING AT BASIN, MONTANA E. & M. J., vol. 79, p. 1005 Table.

COST OF SHAFT SINKING AT GOLD-FIELD, NEVADA. Min & Sci Press, vol. 94, p. 722.

COST OF SHAFT SINKING AT GOLD-FIELD E. & M. J., vol. 84, p. 1106. 1 column.

COST OF SHAFT SINKING AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 436. Table

COST OF SHAFT SINKING IN WISCONSIN ZINC DISTRICT. E & M. J., vol. 81, pp. 1233 and 1234. Table

COST OF SHAFT SINKING IN WISCONSIN ZINC FIELDS. E. & M. J., vol. 81, p. 1234. Tables.

COST OF SHAFT SINKING IN THE POCOHONTAS COAL FIELD. M & M., vol. 27, p. 283. Table.

COST OF SHAFT SINKING IN THE PENNSYLVANIA ANTHRACITE FIELDS. The Anthracite Coal Industry, Roberts, p. 25. 1 page

COST OF SHAFT SINKING IN WESTERN PENNSYLVANIA. M. & M., vol. 30, p. 128. Table.

COST OF SINKING AND CRIBBING THE ATCHISON DEEP COAL SHAFT, KANSAS. E. & M. J., vol. 74, p. 109.

COST OF COLLIERY SINKING AND EQUIPMENT IN BELGIUM. T. I. M. E., vol. 31, p. 698. Table.

See also SHAFT SINKING.

Cost of Signalling

COST OF COMPRESSED AIR MINE SIGNALING. Min. & Sci. Press, vol. 85, p. 220 Table

COST OF INSTALLATION OF COMPRESSED AIR SIGNALING J. C. M. I., vol. 6, p. 167 Tables.

See also COMPRESSED AIR, ELECTRICITY, etc., and METHODS OF SIGNALING.

Cost of Sizing

COST OF SCREENING AND CLEANING COAL. T. F. I. M. E., vol. 1, p. 93.

COST OF SCREENING AND BANKING COAL, ENGLAND T. N. S. I. M. & M. E., vol. 10, p. 256. Table.

COST OF SCREEN CONSTRUCTION. T. N. S. I. M. & M. E., vol. 10 p. 258. Tables.

See also KINDS OF SCREENS, ETC.

Cost of Sorting

ADVANTAGES OF HAND SORTING: Costs. E & M. J., vol. 81, p. 1101.

COST OF SORTING BY HAND. Zinc Ores Rept. Zinc Comm., Canada, p. 79. $1\frac{1}{2}$ pages.

SAVING DUE TO SORTING AT THE RAND MINES. Gold Mines of the Rand, p. 156. Table.

COST OF HAND SORTING ON THE RAND. E. & M. J., vol. 88, p. 1069. Table.

COST OF ORE SORTING, SOUTH AFRICA. Sch Mines Quart., vol. 21, p. 24.

COST OF SORTING AND CRUSHING ON THE RAND. Gold Mines of the Rand, p. 260.

COST OF SORTING ORE AT THE HECLA MINE, COEUR D'ALENE DISTRICT. E. & M. J., vol. 88, p. 1106. Table.

COST OF HAND SORTING vs. MILLING: Comparative Costs Min. & Sci. Press, vol. 88, p. 41. Table.

See also HAND DRESSING, SORTING.

Cost of Stopping

COST OF STOPING. P. C. M. & M Soc. S. A., vol. 7, p. 5. 5 columns. Tables.

COST OF STOPING ON THE RAND. P. C. M. & M. Soc S A., vol 9, p. 225. Tables.

COST OF STOPING, SOUTH AFRICA. E & M J, vol. 75, p. 597

COST OF STOPING IN THE WHITE BEAR MINE. J C. M. I., vol. 11, p. 535. Table

COST OF STOPING IN VEINS OF VARIOUS WIDTHS Min. & Sci. Press, vol. 85, p. 322.

COST OF STOPING IN WESTERN AUSTRALIA Gold Min. & Mill W. Aus., pp. 199, 204, 205, 206, 207, 208. Tables.

COST OF STOPING IN WESTERN AUSTRALIAN MINES Gold Min. & Mill W. Aus., p. 507

COST OF STOPING AT THE GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill W. Aus., p. 616. Table.

COST OF STOPING AT GALENA, KANSAS. Univ Geol. Sur. of Kansas, vol 8, p. 343. 1 page.

COST OF DRIFTING AND STOPING BY HAND AND MACHINES IN COPPER MINES Min & Sci. Press, vol. 48, p. 304. $\frac{1}{2}$ column.

See also **COST OF TUNNELING.**

COST OF STOPING IN TIN MINES, MALAY PENINSULA. Tin Deposits of the World, p. 58.

COST OF STOPING AT THE ESPERANZA MINE, MEXICO Min. & Sci. Press, vol. 99, p. 846. 2 columns. Table.

COST COMPARISON BETWEEN STRIPPING NARROW REEFS AND STOPING THEM WITH WASTE. E. & M. J, vol. 76, p. 883. 1 column.

APPROXIMATE YIELD AND COST OF STOPING PER TON OF ORE BROKEN. Min. & Sci. Press, vol. 71, p. 302. Table.

COST OF STOPING IN THE TIN MINES, MALAY PENINSULA. T. I. M. & M., vol. 7, pp. 13 and 14.

See also **METHODS OF STOPING IN MINES.**

Cost of Stripping

COST OF STEAM SHOVEL MINING. E. & M J, vol. 84, p. 439. 1 column.

COST OF STRIPPING CLINTON IRON ORE IN NEW YORK. E. & M. J, vol. 86, p. 1152 $\frac{1}{2}$ column.

COST OF MINING AND STRIPPING IRON ORE. E & M J, vol. 85, p. 115. $\frac{1}{2}$ column.

COST OF STRIPPING IRON ORE WITH STEAM SHOVEL T. L. S. M. I., vol. 10, p. 153. Tables.

COST OF STRIPPING ANTHRACITE COAL. The Anthracite Coal Industry, Roberts, p. 21. 1 page

COST OF STRIPPING TOP DIRT BY STEAM SHOVEL AT OROVILLE, CALIFORNIA, IN AURIFEROUS GRAVEL DREDGING. E & M. J, vol. 81, p. 220.

See also **OPEN CUT MINING, ETC.**

Cost of Supplies

COST OF MINE SUPPLIES: Timber, Coal, Etc Min. & Sci. Press, vol. 52, p. 256 $\frac{1}{2}$ column.

COST OF SUPPLIES AT GOLDFIELD, NEVADA. E. & M. J., vol. 82, p. 342.

COST OF SUPPLIES AT TONOPAH, NEVADA. E & M. J., vol. 82, p. 107.

MINING SUPPLIES AT MELBOURNE, AUSTRALIA T. I. M. & M., vol 7, p. 111. 2 $\frac{1}{2}$ pages.

COST OF MINING AND MILLING SUPPLIES IN RHODESIA Min. Mag., vol. 13, p. 7. Table.

See also **COST OF MINE AND MILL CONSTRUCTION**

Cost of Support

COST OF TIMBER AND TIMBERING M. & M., vol. 25, p. 458. Table.

COST OF MINE TIMBERING. Min. & Sci. Press, vol. 86, p. 241. 1 column.

COST OF MINE TIMBERING. Min. & Sci. Press, vol. 88, p. 127. Tables.

- ESTIMATION OF COST IN CONNECTION WITH TIMBERING. T. A. I. M. E., vol. 7, p. 84. 10 pages.
- COST OF TIMBERING IN THE SOFT HEMATITE ORES OF FURNESS, ENGLAND. T. F. I. M. E., vol. 8, p. 49.
- RELATIVE COST OF MAINTAINING THE TIMBER IN ANTHRACITE MINES, PENNSYLVANIA. The Anthracite Coal Industry, Roberts, p. 29.
- COST OF TIMBERING AT GALENA, KANSAS: Shaft Cribbing; Drift Timbering; and Placing Cogs. Univ. Geol. Sur. of Kansas, vol. 8, p. 344. 2 pages.
- COST OF TIMBER IN MEXICO. T. A. I. M. E., vol. 35, p. 24.
- COST OF MINE TIMBER ON THE RAND—1902. Witwatersrand Goldfields, p. 458. Table.
- COST OF TIMBERING AT LAKE VIEW CONSOLS AND GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min & Mill. W. Aus., pp. 182 and 214. Tables.
- COST OF TIMBERING IN WESTERN AUSTRALIAN GOLD MINES. Gold Min & Mill. W. Aus., pp. 178, 214. $\frac{1}{2}$ page.
- COST OF DRAWING CHOCKS IN LONGWALL. Coll. Working and Management, p. 94.
- COST OF PILLARING IN LONGWALL. Coll. Working and Management, p. 94.
- COST OF SETTING TIMBER BALKS. Coll. Working and Management, p. 94.
- COST OF PIGSTY SUPPORT IN MINES. P. C. M. & M. Soc. S. A., vol. 7, p. 367. $\frac{1}{2}$ column.
- STOPES: Costs of Stilled and Filled. E. & M. J., vol. 84, p. 1005. Table.
- THE COST OF TIMBER IN MINING. E. & M. J., vol. 46, p. 189. $\frac{1}{2}$ column.
- MINE COSTS AND THE TIMBER SUPPLY. Min. & Sci. Press, vol. 96, p. 504. $1\frac{1}{2}$ columns.
- COST OF TIMBER IN SOUTH AFRICA. Min. & Sci. Press, vol. 94, p. 339. Table.
- COST OF TIMBER DELIVERED AND PILED AT THE EMPIRE MINE, CALIFORNIA IN 1884. Min. & Sci. Press, vol. 49, p. 198.
- COST OF LUMBER AND TIMBER AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Feb., 1906, p. 1327. Table.
- COST OF TIMBER ON THE COMSTOCK. Min. & Sci. Press, vol. 48, p. 258.
- COST OF TIMBER AT TONOPAH. Min. & Sci. Press, vol. 86, p. 20.
- COST OF TIMBER AT TONOPAH, NEVADA. E. & M. J., vol. 82, p. 108.
- PRICE OF ROUND TIMBER AND LAGGING IN THE WEST. Min. & Sci. Press, vol. 92, p. 82.
- PRICE OF TIMBER, VENEZUELA. T. I. M. & M., vol. 9, p. 108. Table.
- COST OF TIMBER AT THE EL CALLAO MILL, VENEZUELA. T. I. M. & M., vol. 9, p. 108.
- See also METHODS OF TIMBERING.
- COST OF TIMBERING A SHAFT: Considerations. Min. & Sci. Press, vol. 87, p. 147.
- COST OF SHAFT LINING AT THE PIONEER MINE, ELY, MINNESOTA. J. C. M. I., vol. 7, p. 361. Table.
- COST OF CRIB-SET FOR DEEP SHAFT. T. I. M. & M., vol. 13, p. 515. Table.
- COST OF TIMBERING AT ASHLAND SHAFT, MICHIGAN. T. L. S. M. I., vol. 9, p. 37. Table.
- COST OF TIMBERING SHAFT, SUTTER CREEK, CALIFORNIA. Min. & Sci. Press, vol. 84, p. 35. Table.
- COST OF LINING MINE SHAFTS WITH STEEL. T. L. S. M. I., vol. 8, pp. 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56.
- COST OF SINKING, RAISING AND TIMBERING SHAFTS, WINZES AND RAISES AT ASHLAND MINE, MICHIGAN. T. L. S. M. I., vol. 9, p. 37. Tables.

- COST OF TIMBERING SHAFT No. 2, TAMARACK. T. I. S. M. I., vol. 7, p. 54.
- COST OF CONCRETE SHAFT LINING Min. & Sci. Press, vol. 89, p. 340. Table.
- COST OF CONCRETE (ELLIPTICAL) SHAFT LINING AT BRIDGEPORT, PENNSYLVANIA M. & M., vol. 27, p. 110 Table
- COST OF MAKING WATERTIGHT A SHAFT LINING WITH CEMENT T. I. M. E., vol. 30, p. 653. Table.
- COST OF CEMENT IN SHAFTING COMPARED WITH BRICK AND IRON. T. F. I. M. E., vol. 4, p. 345
- COST OF CONCRETE SHAFT LINING E. & M. J., vol. 88, p. 600 $\frac{1}{2}$ column.
- COST OF LINING VARIOUS FORMS OF SHAFTS WITH CONCRETE M. & M., vol. 30, p. 632 Tables.
- COST OF CONCRETE LINED SHAFT AT BRIER HILL, MICHIGAN. E. & M. J., vol. 89, p. 971. $\frac{1}{2}$ column
- COST OF REINFORCED CONCRETE LINING FOR GALLERIES. France. Concrete and Constructional Engineering, London, vol. 2, p. 332. Table.
- COST OF MAKING ARTIFICIAL ROOF OF CONCRETE FOR THICK COAL SEAMS. T. I. M. E., vol. 31, p. 26. 2 pages.
- See also USE OF CONCRETE IN MINES.
- COST OF SHAFT TUBBING P. C. M., vol. 2, p. 162 Table.
- See also SHAFT LINING, ETC.
- COST PER TONNAGE OF SQUARE SET TIMBERING. J. C. M. I., vol. 6, p. 136.
- COST OF DOUBLE SET OR DOUBLE TIMBERING PER SET Rept. Insp. Mines, Pa., 1878, p. 232
- NUMBER OF SQUARE SETS PUT UP IN ONE DAY, WITH LABOR COST. Min. & Sci. Press, vol. 85, p. 369.
- See also SQUARE SET TIMBERING.
- COST DATA PER SQUARE SET ROOSLAND, BRITISH COLUMBIA. Min. & Sci. Press, vol. 85, p. 159. Tables.
- COST OF TIMBERING PER TON OF COAL RAISED. T. I. M. E., vol. 16, p. 239. Table.
- COST OF TIMBER PER TON OF COAL MINED, IN THE ANTHRACITE MINES OF PENNSYLVANIA M. & M., vol. 27, p. 148
- PRICE OF MINE TIMBER AT OREGON MINES M. & M., vol. 19, p. 15.
- COST OF FRAMED TIMBER TRESTLES. R. R. Construction, Webb, p. 169. $\frac{1}{2}$ page
- COMPARATIVE COSTS OF WOOD AND STEEL FOR MINE PROPS. M. & M., vol. 27, p. 420
- RELATIVE COST OF TIMBER AND STEEL PROPS E. & M. J., vol. 64, p. 309.
- COST OF STEEL SHAFT LINING. T. I. S. M. I., vol. 10, p. 164 Table
- See also COST OF SHAFT SINKING.
- COST OF MASONRY SUPPORT IN ALMADEN MINES Min. & Sci. Press, vol. 37, p. 342 Tables.
- COST OF MASONRY ARCHES FOR SUPPORT OF HANGING WALLS IN TILLY FOSTER IRON MINES. Sch Mines Quart., vol. 6, p. 316.
- COST OF UNDERGROUND MASONRY WORK Coll. Working and Management, p. 94 Table.
- COST OF PACKWALLING IN ENGLISH COAL MINES — LONGWALL Coll. Working and Management, p. 220. Table.
- COST OF TIMBERING IN PANEL AND LONGWALL. Coll. Working and Management, pp. 244-245. Tables.
- COST OF MASONRY RETAINING WALL. J. W. Soc. E., vol. 3, pp. 1319, 1320, 1327, 1328, 1331
- COST OF DODSON CULM PLANT AND OTHERS. M. & M., vol. 18, p. 389. Table.
- COST OF WATER PACKING OF EXCAVATIONS AT A COLLIERY IN SILESIA. E. & M. J., vol. 78, p. 580.
- COST OF FILLING COAL SEAMS WITH CONVEYORS. T. I. M. E., vol. 29, p. 460. Table.

COST OF FILLING A COAL SEAM. T. I. M. & M., vol. 15, p. 380. 3 pages.

COST OF STOWING PER CUBIC YARD FOR 1890, AT COBEZAS DEL PASTO, SPAIN T. A. I. M. E., vol. 21, p. 100.

COST OF CULM FLUSHING. M. & M., vol. 18, pp. 390, 391.

COST OF HYDRAULIC STOWING IN WESTPHALIA, GERMANY. T. I. M. E., vol. 37, p. 269. 2½ pages Tables

See also **PACKING MINE WORKINGS, ETC**

COST OF WORKING BY GOBBING-UP, USING WASTE OF MINE, AND OBTAINING OTHER WASTE FROM THE SURFACE. T. A. I. M. E., vol. 2, p. 111

See also **KINDS OF SUPPORT.**

Cost of Surveying

COST OF MINERAL SURVEYS IN ARIZONA. Min. & Sci. Press, vol. 85, p. 132. 1 column.

COST OF MINERAL SURVEYS, ETC. Min. & Sci. Press, vol. 88, p. 333. ½ column.

NEW SURVEY RATES. Min. & Sci. Press, vol. 85, p. 2 ½ column

COST OF PATENTING MINING CLAIMS. Min. & Sci. Press, vol. 95, p. 612. ½ column. Table.

COST OF SECURING PATENT TO MINING CLAIM. Min. & Sci. Press, vol. 83, pp. 97 and 191.

COST OF MINE PATENTS By F. W. Wagenen. Min. & Sci. Press, vol. 84, p. 6. 4 columns.

COST OF A MEXICAN PERTENENCIA Min. & Sci. Press, vol. 85, p. 32.

See also **CLAIMS, TAXES, ETC**

TABLE OF FEES FOR MINERS' CERTIFICATES, ETC, IN CANADA. Rept. Zinc Comm., Canada, pp. 371 and 375. Table.

COST OF LICENCES ON THE RAND: Prospectors' and Diggers' Licences. T. N. S. I. M. & M. E., vol. 10, p. 143.

SURVEYS AND ENGINEERING EXPENSES. R. R. Construction, Webb, p. 394.

COST OF A COLLIERY SURVEY M & M, vol. 30, p. 96 ½ column Table. p. 159 3¼ columns.

See also **UNDERGROUND SURVEYS.**

COST OF MAKING A COLLIERY MAP. M & M, vol. 30, p. 159. Table.

COST OF GEOLOGICAL (EUROPEAN) SURVEYS. By E. A. Schneider. E. & M. J., vol. 62, p. 342, 2 columns; p. 366, 2 columns; p. 392, 1 column. See also **SURVEYING.**

Cost of Trammig

COST OF SHOVELING AND TRAMMING. P. C. M. & M. Soc. S. A., vol. 7, p. 8. 2 columns.

COST: Comparison of the Trammig, and the Cost of Trammig with Electric Motors, at New Stassfurt, Zaukeroda, and Hohenzollern. T. A. I. M. E., vol. 20, p. 365.

COST OF TRAMMING IN MINE: In Transvaal. Min. Mag., vol. 12, p. 278. Table.

COST OF TRAMMING ON THE RAND. E & M. J., vol. 81, p. 851 Table.

COST OF TRAMMING ON THE RAND. Witwatersrand Goldfields, p. 298. Table.

COST OF TRAMMING ORE, WESTERN AUSTRALIA. Gold Min. & Mill W. Aus., pp. 161, 616 Tables.

COST OF TRAMMING AT THE PORTLAND MINE, CRIPPLE CREEK, COLORADO. T. A. I. M. E., Bethlehem Meeting, Feb., 1906, p. 1327 Table

COST OF TRAMMING ("PUTTING") IN ENGLISH COAL MINES. Coll Working and Management, p. 82 Tables.

See also **CABLEWAYS, ETC., and TRAMMING AND MUCKING.**

Cost of Operating Tramways

COST OF TRAMWAY. E & M. J., vol. 76, pp. 269, 308.

COST OF TRANSPORTING ORE BY ROPEWAY. Min. & Sci. Press, vol. 72, p. 141.

COST OF ROPE TRAMWAYS PER RUNNING FOOT. E & M. J., vol. 76, p. 513.

COST OF OPERATING TRAMWAYS. E & M. J., vol 76, p. 515

APPROXIMATE PRICE LIST OF WIRE-ROPE TRAMWAYS ON THE ENDLESS ROPE SYSTEM Aerial or Wire-Rope Tramways, p. 194. Table.

ESTIMATING COST OF TRAMWAYS. Aerial or Wire-Rope Tramways, pp 108, 113, 148, 167, and 196. Tables

COST OF TRANSPORTATION BY ROPE-WAY AT THE PIERREFITTE MINES, FRANCE. T. A. I. M. E., vol. 39, p. 390 $\frac{1}{2}$ page.

COST OF MINING AND CONVEYANCE OF ORE. By Bleichert Rope System at Somorostro, Mexico. Min. & Sci. Press, vol. 39, p. 215 Table.

COST OF TRANSPORTING ORE ON THE BLEICHERT TRAMWAY AT THE SMUGGLER-UNION MINE, TELLURIDE, COLORADO. T. A. I. M. E., vol 26, p. 458.

COST OF CONSTRUCTION OF A TRAMWAY, WHICH HAS 38 BUCKETS, WEIGHT 500 LBS. EACH, TOTAL CAPACITY 5000 TONS PER MONTH. T. A. I. M. E., vol. 26, p 458.

COST OF OPERATING HALLIDIE WIRE-ROPE TRAMWAYS. Aerial or Wire-Rope Tramways, pp. 99, 100, 108, 113, 137. Table

COST OF OPERATING THE BLEICHERT WIRE-ROPE TRAMWAY. Aerial or Wire-Rope Tramways. pp. 137, 147, 157, 163, 167, 171.

COST OF CONSTRUCTION AND EQUIPPING THREE MILES OF HALLIDIE'S CABLE RAILROAD, DOUBLE-TRACK. Min. & Sci. Press, vol 43, p. 157. Tables

HANDLING ORE AT THE COUR D'ALENE MINES BY TRAMWAYS. T. A. I. M. E., vol. 33, p. 270. $\frac{1}{2}$ page.

COST OF OPERATING CABLEWAY AT CHICAGO CANAL. The Mechanical Handling of Material, p. 217.

See also CABLEWAYS, ETC.

Cost of Transportation

COST OF NARROW-GAUGE RAILROAD CONSTRUCTION AND OPERATION. Min. & Sci Press, vol 92, p. 101. $\frac{1}{2}$ column.

COMPARATIVE COST OF NARROW-GAUGE RAILROADS. Min. & Sci. Press, vol. 21, p. 27. $\frac{1}{2}$ column.

COST OF CONSTRUCTION AND COMPARATIVE COST OF OPERATING NARROW GAUGE RAILROADS. Min. & Sci Press, vol. 41, p. 6. 1 column.

COST OF A NARROW-GAUGE RAILROAD AT MOJADA, MEXICO T. A. I. M. E., vol 15, p 568.

COST OF RAILROAD MAKING PER MILE FOR SEVERAL YEARS. T. F. I. M. E., vol. 8, p. 451.

COST OF CONSTRUCTING A RAILROAD OF GIVEN LENGTH, ETC. M. & M., Apr., 1902, p 424.

COST OF CONSTRUCTION OF NARROW-GAUGE RAILROAD. Min. & Sci. Press, vol. 38, p 194. Table

THE COST OF A TRAIN-MILE. Min. & Sci Press, vol. 78, p. 404. $\frac{1}{2}$ column.

COST OF STOPPING A TRAIN. Min. & Sci. Press, vol. 70, p. 264. $\frac{1}{2}$ column.

COST OF POWER FOR TROLLEY CARS. Min. & Sci Press, vol. 75, p 101. $\frac{1}{2}$ column.

COST OF OPERATING LOCOMOTIVES. Min. & Sci. Press, vol. 38, p 351. $\frac{1}{2}$ column.

WHAT RAILROAD TRAINS CAN BE RUN FOR. Min. & Sci. Press, vol 51, p. 263 $\frac{1}{2}$ column.

COST OF MOVING RAILROAD TRAINS. Min. & Sci. Press, vol 51, p. 418. $1\frac{1}{2}$ columns.

COST OF MAINTENANCE, REPAIRS, MOTIVE POWER, AND TOTAL OPERATING EXPENSE OF ENGLISH AND AMERICAN RAILROADS. E. & M. J., vol 42, p. 38, table; p. 218. Table.

ESTIMATING WORKING COST OF OPERATING A RAILROAD. E. & M. J., vol.

- 30, p. 410, 2½ columns; p 380, 1 column, p 128, 1½ columns
- SPEED COST IN ATLANTIC STEAMERS. E & M. J., vol. 42, p 205 ½ column.
- COST OF TRANSPORTATION. Min & Sci. Press, vol. 91, p. 53. ½ column.
- MOUNTAIN TRANSPORTATION COSTS. Min. & Sci Press, vol. 88, p. 309. 1½ columns.
- COST: Loss of Shipping Concentrates Min & Sci. Press, vol 93, p. 139.
- CHEAP OCEAN TRANSPORTATION: A Raft of Logs Min & Sci Press, vol. 71, p 83. 5 columns
- COST OF RAILROAD TRANSPORTATION. R. R. Construction, Webb, p. 402. ½ page
- COST OF TRANSPORTATION: by Ocean, River, Lakes, Canals, Railroads, Min & Sci. Press, vol. 30, p. 134. Table.
- COMPARISON OF COST OF SHIPPING AND REFINING BULLION AND MATTE. T A I. M. E., vol. 16, p 261
- COMPARATIVE COST OF PASSENGER TRANSPORTATION BY STEAM, HORSE, CABLE, ELECTRICITY Min & Sci. Press, vol. 65, p. 250. ½ column
- THE COMPARATIVE CONDITIONS AND COSTS OF TRANSPORT BY RAILROAD AND CANAL By J S. Jeans T F. I. M. E., vol. 8, p. 432. 10 pages.
- COST OF TRANSPORT BY RAILROAD AND CANAL, ENGLAND T. N. S I M. & M. E, vol. 9, p. 344. Table.
- COST OF RAILROAD TRANSPORT PER TON PER MILE. T. F. I M. E., vol 8, pp. 453, 454.
- COST OF HAULING ORE ON NARROW GAUGE RAILROAD IN SOUTHERN CALIFORNIA. Min. & Sci. Press, vol. 87, p. 231.
- COST OF TRANSPORTATION IN THE KLONDIKE, 1907 E. & M J., vol. 83, p 521 ½ column
- COST OF TRANSPORTATION OF IRON-ORES OF LAKE-SUPERIOR DISTRICT. T. F I M. E., vol 13, p 530 Table.
- COST OF TRANSPORT OF ORE IN RHODESIA. Min. & Sci. Press, vol. 90, p 106 Table.
- COST OF SHIPPING ZINC ORE TO EUROPE, Rept. of Zinc Comm. Canada, p. 20. ½ page
- TRANSPORTATION, COSTS AND LABOR IN CENTRAL PERU By J C. Pickering E. & M. J, vol. 85, p. 589. 8½ columns I
- FREIGHT AND TREATMENT CHARGES IN SILVER SMELTING IN MEXICO. T I. M. & M., vol 8, p. 246.
- FREIGHT RATES ON ORES. Min. & Sci. Press, vol. 63, p. 40. 1½ columns.
- RAILROAD RATES. Min. & Sci. Press, vol 98, p 334. 1½ columns.
- LAKE FREIGHT RATES FOR 1907. E & M. J., vol 83, p. 380.
- FREIGHT RATES: Chicago to Oregon. Min. & Sci. Press, vol. 85, p 186.
- FREIGHT RATES: San Francisco to Mexico. Min & Sci. Press, vol. 86, p. 67.
- FREIGHT RATES Utah and Nevada. Min & Sci Press, vol 91, p 15.
- STEAMER FREIGHTS TO WESTERN AUSTRALIA By A. G Charlton. Gold Min & Mill W Aus, p. 450. 2 pages.
- FREIGHT RATES ON MACHINERY FROM DETROIT TO WESTERN POINTS Min. & Sci. Press, vol. 84, p. 140.
- FREIGHT RATES IN THE WEST. Min. & Sci. Press, vol. 25, p. 40. ½ column
- FREIGHT RATES ON THE BAY, SAN FRANCISCO. Min. & Sci. Press, vol. 66, p 363. 2 columns
- RAILROAD RATES IN EUROPE AND AMERICA. Min & Sci. Press, vol. 75, p 361. Table.
- COMPARATIVE COST OF FREIGHT AND PASSENGER TRAFFIC Min & Sci. Press, vol 37, p. 22. ½ column.
- RAILROAD RATES ON COAL. E & M. J., vol 66, p. 402.

- INDIANA COAL RATES E. & M. J., vol 80, p. 835 1 column.
- RAILROAD TRANSPORTATION RATES IN THE ANTHRACITE COAL FIELDS. The Anthracite Coal Industry, Roberts, p 74 4 pages
- COST OF FREIGHT ON COAL FROM JAFFA TO JERUSALEM E. & M. J., vol. 78, p. 211.
- FREIGHT RATES ON COAL IN MISSOURI. E. & M. J., vol. 85, p. 270 $\frac{1}{2}$ column.
- ILLINOIS COAL FREIGHT-RATES T. A. I. M. E., vol. 40, p. 72. Table
- RAILROAD RATE FROM BUTTE TO ANACONDA. E & M. J., vol 81, p. 1247.
- RAILROAD RATES ON CRUDE OIL FROM TEXAS AND CALIFORNIA TO COPPER QUEEN MINE. E. & M. J., vol 81, p. 1247.
- FREIGHT RATES ON THE RAND (1895). Gold Mines of the Rand, p. 245. Table.
- FREIGHT RATES IN WESTERN AUSTRALIA. Gold Min & Mill. W. Aus., p. 444. 9 pages
- FREIGHT RATES FROM BROKEN HILL E. & M. J., vol. 81, p. 421 $\frac{1}{2}$ column.
- RAILROAD RATES ON CRIPPLE CREEK ORES. Min. & Sci. Press, vol. 95, p. 517. $\frac{1}{2}$ column.
- FREIGHT RATES IN THE MONTEZUMA DISTRICT, COLORADO M & M., vol. 28, p. 503 $\frac{1}{2}$ column.
- FREIGHT RATES ON GOLD ORES IN COLORADO. Min. & Sci Press, vol. 100, p. 35. Table.
- FREIGHT RATES IN THE CRIPPLE CREEK DISTRICT M & M, vol. 28, pp 479-480. Tables
- FREIGHT RATES AT TONOPAH, NEVADA. E. & M. J., vol. 82, p. 107. Table.
- FREIGHT RATE FROM SODAVILLE TO TONOPAH PER TON (1901). Min. & Sci. Press, vol. 83, p. 192.
- FREIGHT RATES FROM BOISE TO ALL POINTS IN THE BASIN RANGE IN 1900. Min. & Sci Press, vol 81, p. 400.
- WAGON AND RAILROAD FREIGHT RATES AT TONOPAH. M & Sci Press, vol. 86, p. 20
- TRANSPORTATION INTO GOLDFIELD Min. & Sci. Press, vol 90, p 150
- IRON-ORE FREIGHT RATES. E & M. J., vol 82, p 597
- VESSEL FREIGHT RATES ON IRON-ORES T. A. I. M. E., vol. 16, p 197.
- FREIGHT RATES FROM THE CŒUR D'ALENE DISTRICT Min & Sci. Press, vol 101, p. 142 $1\frac{1}{2}$ columns
- COST OF SHIPPING ZINC ORE TO EUROPE: Freight Rates Min. Mag., vol 12, p 227. 2 columns.
- FREIGHT RATES ON ZINC ORE FROM SLOCAN TO FRANK Rept Zinc Com., Canada, p. 55. Table
- See also TRANSPORTATION BY RAIL
- NOTE ON THE COST OF IRON RAILS AS MADE IN 1866 IN A LEADING ENGLISH RAILROAD COMPANY'S ROLLING MILL By P Barnes. T A I. M. E, vol 6, p 524.
- COST OF REPAIRS AND RENEWALS OF PILE BRIDGES. E & M J, vol 50, p. 313. $\frac{1}{2}$ column.
- COST OF SNOW SHEDS AND TIE CRIBBING, CANADIAN PACIFIC RAILROAD. E. & M. J, vol. 47, p. 212.
- COST OF CONSTRUCTING A REINFORCED CONCRETE ARCH. Eng-Cont., vol. 27, p. 86. 3 columns
- COST OF ECONOMIC CENTERS FOR A REINFORCED CONCRETE ARCH Eng-Cont, vol. 27, p 30 7 columns.
- COST OF MASONRY (BRIDGE), ESPECIALLY FOR RAILROAD WORK R. R Construction, Webb, p 400. Table'
- COST OF LAYING MINE TRACK E & M J., vol 86, p 135. $1\frac{1}{2}$ columns.
- COST OF MINE TRACK. M. & M, vol. 31, p. 727. Table.
- COST OF ELECTRICALLY WELDING RAIL-JOINTS. Eng-Cont, vol. 27, pp. 126 and 127. $2\frac{1}{2}$ columns.
- COST OF RAILROAD RAILS R. R Construction, Webb, p 248. $\frac{1}{2}$ page.

- COST OF RAILS PER MILE** R. R. Construction, Webb, p. 397. Table.
- COST OF MAKING STEEL RAILS.** E. & M. J., vol. 38, p. 296.
- COST OF TRACK SCALES.** M. & M., vol. 25, p. 458. Table.
- COST OF TRACK LAYING.** M. & M., vol. 25, p. 458. Table.
- See also **MINE ROADS AND TRACKS.**
- COST OF REPAIRS TO MINE CARS.** E. & M. J., vol. 86, p. 135. 2 columns.
- See also **MINE CARS, ETC.**
- COST OF RAILROAD CARS.** Min. & Sci. Press, vol. 52, p. 327. $\frac{1}{2}$ column.
- BILLS OF MATERIAL AND COSTS PER RUNNING FOOT FOR BRIDGES AND VIADUCTS OF TIMBER.** T. F. I. M. E., vol. 8, pp. 131, 133, 137, 142.
- INCREASED COST OF MATERIALS FOR RAILROAD CONSTRUCTION.** Eng.-Cont., vol. 27, p. 39. $1\frac{1}{2}$ columns.
- COST OF SUBMARINE CABLES.** Min. & Sci. Press, vol. 92, p. 157.
- COST OF LAND AND LAND DAMAGES IN ENGINEERING WORK, ESPECIALLY RAILROAD CONSTRUCTION.** R. R. Construction, Webb, p. 394.
- COST OF ELECTRICAL CANAL HAULAGE.** Engineering, London, vol. 64, p. 252. $5\frac{1}{2}$ columns; p. 347, 3 columns, p. 402, 3 columns; p. 428, 3 columns; and vol. 66, p. 728. Tables.
- COST OF CANAL-HAULAGE BY ELECTRICITY, STEAM, AND HORSE-POWER.** T. F. I. M. E., vol. 8, pp. 440, 456, 478, and 480.
- COST OF TRANSPORTATION ON THE ERIE CANAL.** E. & M. J., vol. 25, p. 239. $\frac{1}{2}$ column.
- COST OF TRANSPORTATION OF ANTHRACITE COAL BY CANAL.** The Anthracite Coal Industry, Roberts, p. 64, 1 page.
- COST OF CHICAGO DRAINAGE CANAL, COMPARED WITH OTHER WORKS OF ITS CLASS.** Engineering, London, vol. 63, p. 1. Table.
- See also **CANAL TRANSPORTATION.**
- COST OF WAGON ROAD CONSTRUCTION.** E. & M. J., vol. 78, p. 869.
- COST OF MATERIALS AND WAGES OF LABOR FOR PAVING WORK IN REPRESENTATIVE AMERICAN CITIES.** Eng.-Cont., vol. 27, p. 133. 10 columns.
- COST OF HAULAGE by Carts, Wagons, Wheelbarrows, and Scrapers.** R. R. Construction, Webb, pp. 128, 139. 7 pages.
- COST OF TRANSPORTATION: by Pack-trains, Wagons, and Locomotives.** By C. F. Lummis. McClures' Magazine, vol. 26, No. 1, Nov, 1905, p. 85.
- FREIGHT AND TREATMENT CHARGES ON CRIPPLE CREEK ORE.** E. & M. J., vol. 78, p. 1022. Table.
- COST OF HAULING BY WAGON IN SAN JUAN MOUNTAINS, FOUR-HORSE TEAM.** E. & M. J., vol. 76, p. 82.
- COST OF WAGON HAULAGE IN THE MOUNTAINS OF THE WEST.** Min. & Sci. Press, vol. 92, p. 51.
- FORMER COSTS OF TRANSPORTING ANTHRACITE COAL BY WAGON.** The Anthracite Coal Industry, Roberts, p. 62.
- COST OF CARRYING (HAULAGE) IN WAGONS.** T. N. S. I. M. & M. E., vol. 10, p. 171.
- COST OF WAGON HAULAGE IN MONTANA.** Min. & Sci. Press, vol. 41, p. 98.
- COSTS AND PROFITS OF GOOD ROADS.** Min. & Sci. Press, vol. 67, p. 423. $1\frac{1}{2}$ columns.
- COST OF MAKING A CORDUROY ROAD.** Eng.-Cont., vol. 27, p. 59. $\frac{1}{2}$ column.
- METHODS AND COST OF REDUCING DUST AND HARDENING ROADS BY SURFACE APPLICATIONS.** By J. W. Howard. Eng.-Cont., vol. 27, p. 143. 9 columns.
- COST OF CUTTINGS AND EMBANKMENTS FOR MINING ROADS.** Engineering, London, vol. 70, p. 41. $1\frac{1}{2}$ columns.
- See also **WAGON ROADS, ETC.**

COST OF AUTOMOBILE OPERATION Machinery, vol. 12, June, 1906, p. 518. Table.

COST OF PORTAGE IN COLOMBIA. Min. & Sci. Press, vol. 99, p. 183 $\frac{1}{2}$ column. Table

COST OF FLUME TRANSPORTATION OF ORE IN ALASKA. Min. & Sci. Press, vol. 71, p. 26

See also COST OF FLUME CONSTRUCTION AND PORTAGE, PACKING AND FLUMING.

Cost of Tunneling

COST OF TUNNELING R. R. Construction, Webb, p. 195. $\frac{1}{2}$ page. Table.

COST OF TUNNEL BUILDING. Min & Sci. Press, vol. 83, p. 256. Tables.

TUNNEL EXPENSES. Min & Sci. Press, vol. 91, p. 190. Table

COST OF TUNNEL EXCAVATION AND TIME REQUIRED FOR WORK. Tunneling, Prelini, p. 300. $7\frac{1}{2}$ pages

COST OF TUNNEL DRIVING. Min. & Sci. Press, vol. 94, p. 272.

TUNNEL DRIVING AT LOW COST. By W H. Bunce. Min. & Sci. Press, vol. 97, p. 60. $1\frac{1}{2}$ columns.

COST OF TUNNEL DRIVING. A Record of Economy. Min. & Sci. Press, vol. 97, p. 60. $1\frac{1}{2}$ columns.

COSTS OF PAST AND PRESENT TUNNELING AND MILLING. Min. & Sci. Press, vol. 74, p. 235. $\frac{1}{2}$ column.

COST OF TUNNELING. Min. & Sci. Press, vol. 74, p. 411. $\frac{1}{2}$ column.

COST OF TUNNEL EXCAVATION PER FOOT. Tunneling, Prelini, p. 122.

ESTIMATED COST OF AMERICAN TUNNELS. Tunneling, Prelini, p. 122. Tables.

COST OF BOSTON SUBWAY PER FOOT. Tunneling, Prelini, pp. 192, 200.

COST OF TUNNELING THROUGH SANDSTONE, LIMESTONE AND SLATE. M. & M., vol. 18, p. 311.

COST OF CONSTRUCTING A TUNNEL THROUGH CLAY. Eng.-Cont, vol. 27, p. 51. $7\frac{1}{2}$ columns.

COST OF COMPRESSED AIR TUNNELING. Engineering, London, vol. 66, p. 634. Table.

LOW-COST TUNNELING WITH ELECTRIC DRILLS E & M J, vol. 79, p. 758. $\frac{1}{2}$ column.

COST OF TUNNELING WITH A TEMPLE-INGERSOLL ELECTRIC-AIR DRILL. M. & M, vol. 27, p. 53.

COST AND RATE OF WORKING OF THE STANLEY HEADING-MACHINES T. F. I. M. E, vol. 6, pp 7 and 8.

COST OF TUNNEL DRIVING IN BURMA. T. I. M & M, vol. 5, pp. 136, 170, 220.

COST OF TUNNELING IN CALIFORNIA. Miner's Pocket Book, Lock, p. 218. Table

COST OF TUNNELING AT THE MELONES MINE, IN CALAVERAS COUNTY, CALIFORNIA. By W. C. Ralston. E. & M. J., vol. 66, p. 758. $1\frac{1}{2}$ columns.

COST OF TUNNELING IN LEHIGH REGION. Second Geol. Sur. Pa., A C, p. 100, 102.

COST OF TUNNELING AT THE HOGSBACK MINE, PLACER COUNTY, CALIFORNIA. By W C Ralston E. & M. J, vol. 48, p. 160. $1\frac{1}{2}$ columns.

COST OF TUNNELING IN CONNECTION WITH HYDRAULIC MINING IN CALIFORNIA. E. & M J, vol. 11, p 120 $\frac{1}{2}$ column.

COST OF BEDROCK TUNNELING, CALIFORNIA Min. & Sci. Press, vol. 18, p. 376. $\frac{1}{2}$ column.

COST OF CALIFORNIA PLACER TUNNELS. Min. & Sci. Press, vol. 34, p 103. $\frac{1}{2}$ column.

COST OF TUNNELING IN RHYOLITE: Iron Mountain, Shasta County, California. Min & Sci. Press, vol. 94, p. 56. Table.

COST OF DRIVING THE LOS ANGELES TUNNEL. Min. & Sci. Press, vol. 100, p. 681. 3 columns. Tables.

- COST OF LOS ANGELES AQUEDUCT. M. & M., vol. 31, p. 138 6 columns. Tables
- COST OF TUNNEL DRIVING IN COLORADO. Min. & Sci. Press, vol. 99, pp. 744, 745, 746 and 747. Tables.
- LENGTHS AND COSTS OF CRIPPLE CREEK TUNNELS. Min. & Sci. Press, vol. 83, p. 201.
- COST OF VARIOUS TUNNELS. Min. & Sci. Press, vol. 83, p. 213.
- COST DATA OF THE GUNNISON TUNNEL. By L. Duncan. E. & M. J., vol. 80, p. 59. 1½ columns.
- COST OF DRIVING TUNNEL FOR HYDRAULIC MINING IN COLORADO. Min. & Sci. Press, vol. 93, p. 688. Table.
- COST OF DRIVING THE NEWHOUSE TUNNEL M. & M., vol. 27, p. 37. Table.
- DETAILED COST OF DRIVING THE NEWHOUSE TUNNEL PER FOOT. E. & M. J., vol. 73, p. 553. Table
- COST OF WORK IN THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL. E. & M. J., vol. 86, p. 758. 1 column
- COST OF DRIVING IRON MOUNTAIN TUNNEL E. & M. J., vol. 85, p. 564. Table.
- COST OF TUNNELING, GEORGIA GOLD FIELDS. E. & M. J., vol. 61, p. 617.
- COST OF TUNNELING, DELAMAR, IDAHO. Min. & Sci. Press, vol. 80, p. 150. Table.
- COST OF TUNNELING ON THE MOTHER LODE. Min. & Sci. Press, vol. 77, p. 446. Tables.
- THE BI-METALLIC TUNNEL, GRANITE-MOUNTAIN, MONTANA. M. & M., vol. 17, p. 130. ½ column.
- COST OF TUNNELING IN THE ANTHRACITE FIELDS E. & M. J., vol. 84, p. 503. ½ column
- COST OF THE LOCUST MOUNTAIN TUNNEL, ASHLAND, PENNSYLVANIA. Coll. Engr., vol. 11, p. 11. ½ column.
- COST OF DRIVING TUNNELS IN PENNSYLVANIA COAL MINES. Rept Insp. Mines, Pa., 1878, p. 248 Table.
- PROBABLE COST, COMPLETE, OF DRIVING A 7½' X 9' TUNNEL IN THE SOUTHERN COAL FIELD. M. & M., vol. 20, p. 139.
- See also EXAMPLES OF TUNNELS
- COST OF DRIVING SLOPES IN THE ANTHRACITE FIELDS. The Anthracite Coal Industry, Roberts, p. 22.
- COST OF SINKING "STAPLES" (INCLINES) IN ENGLISH COAL MINES. Coll. Working and Management, p. 93. ½ page
- COST OF THE LOCUST MOUNTAIN TUNNEL, ASHLAND, PENNSYLVANIA. E. & M. J., vol. 50, p. 101 ¾ column.
- COST OF CONSTRUCTING A LARGE CONCRETE SEWER, ST. LOUIS, MISSOURI. Eng-Cont., vol. 27, p. 61. 4 columns I.
- COST OF ENTRY DRIVING. M. & M., vol. 25, p. 458. Table.
- COST OF DRIVING ENTRY. M. & M., vol. 20, p. 428.
- COST OF DRIVING ENTRIES AND ROOMS. E. & M. J., vol. 75, p. 331.
- COST OF DOUBLE ENTRIES PER FOOT. E. & M. J., vol. 75, p. 332.
- APPROXIMATE COST OF ENTRY: Driving by Machine and Hand in Colorado. Coll. Engr., vol. 11, p. 223. Table.
- COST OF DRIVING ENTRIES AND ROOMS. E. & M. J., vol. 85, p. 896. 1½ columns
- See also ROOMS AND ENTRIES.
- COST OF DRIVING GANGWAYS IN PENNSYLVANIA COAL MINES WITH DIMENSIONS Rept. Insp. Mines, Pa., 1879, pp. 322 and 323. Table.
- COST OF DRIVING GANGWAYS AND AIRWAYS IN THE PENNSYLVANIA ANTHRACITE FIELDS. The Anthracite Coal Industry, Roberts, p. 26. Tables.

- COST OF DRIVING MINE OPENINGS IN ENGLISH COAL MINES. Coll. Working and Management, pp 172, 244 and 245. Tables.
- COST OF DRIVING A STONE-DRIFT IN ENGLAND. T. I. M. E., vol. 18, p. 122.
- COST OF DRIVING STONE DRIFTS, ENGLAND. P. C. M., vol. 2, p. 253. Table
- COST OF STONE-DRIFTS IN ENGLISH COAL MINES. Coll. Working and Management, pp. 90 and 92. Tables
- COST OF ROCK WORK IN COAL SEAMS. E. & M. J., vol. 74, p. 407. Table.
- COST OF DRIVING AND CROSS-CUTTING AT THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 436. Table.
- COST OF CROSS-CUTS AND STATION. M. & M., vol. 31, p. 729. Table.
- COST OF DRIVING CROSS-CUTS. M. & M., vol. 31, pp 695-697. Tables
- COST OF WORKING IN MINES: Especially Drifting. Min. & Sci. Press, vol. 33, p. 292. $\frac{1}{2}$ column.
- METHOD OF CALCULATING COST OF MAKING A SLANTING CUT CONNECTING TWO FAULTED PORTIONS OF A COAL SEAM. Coll. Working and Management, pp. 85 and 91. Table
- COST OF DRIFTING BY AIR DRILLS. Min. & Sci. Press, vol. 82, p. 179. $\frac{1}{2}$ column.
- COST OF DRIFTING. M. & M., vol. 31, p. 730. Table.
- COST OF DRIFTING, SOUTH AFRICA. E. & M. J., vol. 75, p. 597
- COST OF DRIFTING ON THE RAND. Gold Mines of the Rand, p. 259 $\frac{1}{2}$ page.
- MINING COSTS ON THE YUKON: Drifting. E. & M. J., vol. 75, p. 892. Table.
- COST OF DRIFTING AND SHAFT-SINKING AT TONOPAH. E. & M. J., vol. 82, p. 108.
- COST OF DRIFTING AND STOPING IN THE LAKE SUPERIOR COPPER MINES. E. & M. J., vol. 82, p. 645. 6 columns.
- COST OF DRIFT TUNNELING, RED POINT, CALIFORNIA. Min. & Sci. Press, vol. 68, p. 151. Table
- COST OF DRIFTING IN THE CRIPPLE CREEK DISTRICT. M. & M., vol. 30, p. 10. Tables.
- COST OF DRIFTING WITH A WATER LEYNER DRILL, NEWHOUSE TUNNEL, IDAHO SPRINGS, COLORADO. M. & M., vol. 27, pp. 73 and 74. Table
- COST OF DRIFTING IN OREGON MINES. M. & M., vol. 19, p. 15
- COST OF DRIFTING BY NATIVE LABOR IN CENTRAL AMERICA. Min. & Sci. Press, vol. 89, p. 338. Table
- COST OF DRIFTING AT GALENA, KANSAS. Univ. Geol. Sur. of Kans., vol. 8, p. 341. $1\frac{1}{2}$ pages.
- COST OF DRIFTING, HOMESTAKE MINE. Min. & Sci. Press, vol. 88, pp 128 and 147. Tables.
- COST OF DRIFTING IN THE SAHUAYACAN MINE, MEXICO. E. & M. J., vol. 80, p. 1214. Table
- COST OF DRIFTING IN THE WHITE BEAR MINE. J. C. M. I., vol. 11, p. 534. 1 page. Tables.
- COST PER FOOT OF DRIVING DRIFTS, WINZES, SHAFTS, ETC., PARK CITY, UTAH. Min. & Sci. Press, vol. 91, p. 334. Table.
- COST OF RUNNING A DRIFT IN SUMATRA. P. C. M. & M. Soc. S. A., vol. 10, p. 317. Table.
- COST OF DRIVING IN THE TIN MINES OF THE MALAY PENINSULA. T. I. M. & M., vol. 7, p. 14.
- COST OF DRIVING AND CROSS-CUTTING, NEW SOUTH WALES. T. I. M. & M., vol. 7, p. 151.
- COST OF DRIFTING IN THE TIN MINES OF THE MALAY PENINSULA. Tin Deposits of the World, p. 58.
- COST OF DRIVING DEEP LEVELS IN NOVA SCOTIA. J. M. Soc. N. S. vol. 9, p. 96. Table.
- COST OF RUNNING LEVELS AND CROSS-CUTS, LINCOLN MINE, CALIFORNIA.

Min. & Sci. Press, vol. 86, p. 25. Table.

COSTS OF DRIVES AND LEVELS IN WESTERN AUSTRALIA MINES Gold Min. & Mill, W. Aus, pp. 174 and 214. 2 pages.

COST OF DRIVING AT GOLDEN HORSESHOE, WESTERN AUSTRALIA. Gold Min. & Mill, W. Aus., p. 616 Table

COST OF DRIVING LEVEL ON THE RAND T. N S I. M. & M. E., vol 10, p. 136

See also **METHODS OF TUNNELING, AND EXAMPLES OF TUNNELS.**

COST OF DRIVING A RAISE E. & M. J., vol 89, p. 1326. Table.

COST OF DRIVING RAISES M. & M., vol 31, p. 731 Table.

COST OF DRIVING WINZES AND RISES Miner's Pocket Book, Lock, pp 221, 222. Table.

Cost of Ventilation

COST OF VENTILATION BY DIFFERENT SYSTEMS. Miner's Pocket Book, Lock, pp 338, 340. $\frac{1}{2}$ page

COST OF VENTILATING EQUIPMENT. M. & M., vol. 25, p 458. Table

See also **MECHANICAL VENTILATORS, FANS, ETC**

COST OF VENTILATION IN THE COM-STOCK MINES, NEVADA. T A. I. M. E., vol 41, p. 42. 1 page.

COST OF VENTILATING DRIFT MINES. Min. & Sci Press, vol 68, p 165. Table.

COST OF VENTILATION PER TON OF COAL MINED: Anthracite Fields. Coal Mining Supplement, E. & M. J., vol. 88, p 24. $\frac{1}{2}$ column.

COST OF MAKING AN AIR CROSSING. Coll. Working and Management, pp. 86, 146 and 147. $\frac{1}{2}$ page. Tables.

COST OF CONCRETE OVERCASTS. E. & M. J., vol. 84, p. 451. $\frac{1}{2}$ column.

COST OF CONSTRUCTING AN AIR-TIGHT BRATTICE IN A COAL MINE, ENGLAND. Coll. Working and Management, p. 142 Table.

See also **STOPPING, DOORS AND REGULATORS IN MINES.**

COMPARISON OF COST OF POWER IN EXHAUST AND PLENUM VENTILATION OF MINES AND DWELLINGS. By W P. Trowbridge Sch. Mines Quart., vol. 6, p. 82 $1\frac{1}{2}$ pages.

COST OF AIR (VENTILATION) TUBES. Coll. Working and Management, p. 143. $\frac{1}{2}$ page. Table.

FIRST COST OF MECHANICAL VS. CHIMNEY DRAFT. E. & M. J., vol. 83, p. 280 1 column.

COST OF SPRAYING OPERATIONS. E. & M J, vol. 87, p. 195. 2 columns.

COST OF EQUIPPING COAL MINES FOR SPRAYING. M. & M, vol. 29, p. 103. $\frac{1}{2}$ column.

COST OF WATERING COAL-DUST IN GERMANY. T. F. I. M. E, vol. 9, p. 94.

See also **METHODS OF VENTILATING MINES.**

Cost of Washing Coal and Ores

COST OF COAL-WASHING WITH THE LÜHRIG SYSTEM. T. F I M. E., vol 7, p 399.

COST OF JIG-WASHING OF COAL. E. & M. J., vol 84, p. 20 Table

COST OF (COAL) WASHING PER TON: On Basis of Daily Output of 300 Tons Sch Mines Quart., vol. 17, p 399 Table.

COST OF COAL-WASHING BY MURTON WASHER. T. F. I. M. E., vol. 9, p. 44.

COST OF WASHING COAL, ALABAMA. T A, I. M. E., vol. 25, p. 127.

COST OF CLEANING BITUMINOUS COAL. E. & M. J., vol. 77, p. 558.

COST OF WASHING COAL AT NORTH MOTHERWELL COLLIERY. T. F. I. M. E., vol. 6, p. 395.

COST OF WASHING ANTHRACITE FINE COAL. The Anthracite Coal Industry, Roberts, p. 225. 2 pages.

**COST OF ANTHRACITE COAL WASH-
ERIES, PENNSYLVANIA.** The An-
thracite Coal Industry, Roberts,
p. 224. 1 page.

See also **WASHING COAL AND MINERAL**

Cost of Water

**COST OF WATER FOR KIMBERLEY DIA-
MOND MINES.** E. & M. J., vol 76,
p 237.

**COST OF WATER FOR MILLING PUR-
POSES AND DOMESTIC USES AT THE
MERCUR MINES, UTAH (1897).** E.
& M J., vol. 63, p. 428.

See also **WATER IN MILLING.**

**COST OF WATER AND HOMESTEAD FEES
AND COMMISSIONS, IN NEVADA.** Min.
& Sci. Press, vol. 91, p 62. Table

**COST OF WATER IN WESTERN AUS-
TRALIAN MINES.** Gold Min. & Mill.
W. Aus., pp. 131, 143, 144. Tables

**RATE OF CHARGE FOR WATER, VICTORIA
MINING DISTRICTS.** Min. & Sci.
Press, vol. 21, p 14.

**COST OF CONDENSING WATER, WEST-
ERN AUSTRALIA.** Gold Min & Mill.
W. Aus., p. 132.

**COST AND RETURNS PER MINER'S INCH
IN GOLD GRAVEL WORKING.** Min.
& Sci. Press, vol. 85, pp. 324, 325.
Table

**COST AND RETURNS PER MINING INCH
IN HANDLING LOW-GRADE GRAVEL.**
Min & Sci. Press, vol. 86, p 244.
Table.

**COST OF WATER IN THE CALIFORNIA
HYDRAULIC MINES.** E & M. J.,
vol. 11, p. 120.

**COST AND PRESSURES OF WATER FOR
HYDRAULIC MINING.** Min. & Sci.
Press, vol. 65, p. 314. $\frac{1}{2}$ column.

See also **HYDRAULIC MINING, ETC., and
COST OF HYDRAULIC MINING.**

**COST OF WATER SOFTENING BY THE
ARCHBUTT-DEELEY PROCESS.** Engi-
neering, London, vol. 66, p 232.
Table.

ECONOMY IN THE USE OF WATER. Min.
& Sci. Press, vol. 78, p 432. $\frac{1}{2}$ col-
umn.

**ECONOMIZING WATER IN CONCENTRA-
TION.** Min. & Sci Press, vol 77,
p. 633. 1 column

See also **SOURCE AND SUPPLIES OF
WATER.**

DAMS FOR MINING PURPOSES

**Stresses in Dams, Their Stability
and Other Data**

MASONRY DAM FORMULAS. By O. L.
Brodie. Sch. Mines Quart., vol. 29,
p. 241. 33 pages. I.

**SOME RECENT CONSIDERATIONS OF
STRESSES IN HIGH MASONRY DAMS.**
By C. E. Morrison. Sch. Mines
Quart., vol 31, p. 145. 27 pages. I.

STABILITY OF DAMS. By J. F. Jackson.
Min. & Sci. Press, vol. 100, p. 324.
4 $\frac{1}{2}$ columns. I.

**SOME OBSERVATIONS ON THE STABILITY
OF DAMS.** By J. F. Jackson. J. W.
Soc. E., vol. 14, p. 625. 16 pages. I.

Description of Dams and Their Construction

SLAG-DAMS. Min & Sci. Press, vol. 95,
p. 553. 2 columns. I.

SLAG DAM. By F. M. Smith. Min.
& Sci Press, vol. 95, p. 205. $\frac{1}{2}$ col-
umn.

NOTES ON THE BELUBULA DAM By
O. Schulze. T. Au. I. M. E., vol. 4,
p. 160. 12 pages. I.

A COLORADO MOUNTAIN RESERVOIR.
By R. M. Hosea. J. W Soc. E.,
vol. 12, p. 495. 19 $\frac{1}{2}$ pages. I.

**THE CHEW RESERVOIR OF THE ASH-
TON-UNDERLYNE, STALYBRIDGE, AND
DUKINFIELD DISTRICT WATER-
WORKS.** By A. L. Mellor. T. I.
M. E., vol. 38, p. 229. 4 pages. I.

**FAILURE OF THE YUBA RIVER DÉBRIS
BARRIER.** By H. H. Wadsworth.
Min. & Sci. Press, vol. 101, p. 630.
7 $\frac{1}{2}$ columns. I.

**TAILINGS DAM OF THE CANANEA CON-
SOLIDATED COPPER COMPANY.** By

L. D. Ricketts. E. & M. J., vol. 89, p. 502. 2½ columns. I

HYDRAULIC FILLING OF DAM. By D. F. Campbell. Min. & Sci. Press, vol. 97, p. 30. 30½ columns

See also DISPOSAL OF WASTE.

REINFORCED CONCRETE RESERVOIR. By J. B. Henson. E. & M. J., vol. 90, p. 205. 2 columns. I

See also USE OF CONCRETE IN MINES

FIRE-PROOF DOORS. E. & M. J., vol. 87, p. 300. 1½ columns.

See also MINE FIRES

FREEZING METHOD FOR RESTRAINING MINE WATERS. By E. H. Nuttor. Min. & Sci. Press, vol. 99, p. 617 ½ column.

See also SOURCE AND SUPPLIES OF WATER.

See also COST OF DAMS, ETC.

Underground Dams

UNDERGROUND DAMS. By A. S. Kenyon. T. Au. I. M. E., vol. 7, p. 113. 8 pages. I.

DAMS IN THE WABANA MINES J. C. M. I., vol. 13, p. 634 ½ page.

BRICKWORK DAMS IN THICK COAL. By L. Holland T. I. M. E., vol. 37, p. 54. 5 pages I

A CONCRETE BLOCK MINE DAM. M. & M., vol. 29, p. 47. ¾ column. I.

See also USE OF CONCRETE IN MINES

GATE FOR CONTROLLING MINE WATER. E. & M. J., vol. 89, p. 452 ¾ column. I.

See also INUNDATIONS IN MINES.

WATER-TIGHT BULKHEAD DOOR. E. & M. J., vol. 87, p. 262. 1 column. I.

CAST-IRON MINE BULKHEAD. E. & M. J., vol. 88, p. 991. 1½ columns. I.

MINING DISTRICTS

Miscellaneous Districts

PRINCIPAL MINES IN AMERICA. Min. & Sci. Press, vol. 96, p. 161 Table. 2 columns.

PARALYSIS OF MINING DISTRICTS By E. B. Kirby. Min. & Sci. Press, vol. 99, p. 467 7 columns

ASBESTOS: Occurrence and Uses. By H. R. Edgecomb. M. & M., vol. 31, p. 469. 6½ columns. I.

BISMUTH: Its Occurrence and Use. By E. B. Wilson. M. & M., vol. 30, p. 105. 5½ columns.

AMERICAN BORAX DEPOSITS. By C. R. Keyes. E. & M. J., vol. 88, p. 826. 5 columns I.

See also UNITED STATES

OUR STEAM-COAL AND ITS USES. By L. Knowles. T. I. M. E., vol. 36, p. 273. 13 pages.

CUMBERLAND COAL. Min. Mag., vol. 1, p. 35. 9 pages.

SEMI-BITUMINOUS COAL-FIELDS OF GREAT BRITAIN AND AMERICA COMPARED. By Professor Whitaker. Min. Mag., vol. 10, p. 189. 2 pages.

AMERICAN VS. EUROPEAN COAL MINES. By H. M. Payne. M. & M., vol. 31, p. 195. 2½ columns.

BRIEF NOTES ON EUROPEAN COAL MINES. By F. W. Parsons. E. & M. J., vol. 88, p. 497, 7½ columns, I; p. 589, 12 columns, I; p. 809, 11 columns, I.

KAOLINS AND FIRE CLAYS OF EUROPE. By H. Rice. U. S. G. S., 19th Ann. Rept., pt. 6, 91 pages, 1897-98.

COPPER PROSPECTS. By T. L. Carter. P. C. M. & M. Soc. S. A., vol. 5, p. 305, 9 columns, I; vol. 6, p. 80, ½ column; p. 111, 1½ columns

DIAMOND-CARBON IN METEORITES. Min. & Sci. Press, vol. 95, p. 310. ¾ column.

CARBONS: The Black Diamond. By J. Baszanger. Min. & Sci. Press, vol. 95, p. 788. ¾ column

RARE EARTHS: Their Occurrence and Use. By C. Bogenrieder. T. Au. I. M. E., vol. 13, p. 87. 28 pages.

THE RARE METALS: Beryllium. By C. Baskerville. E. & M. J., vol. 86, p. 907. 2½ columns.

- BORON: Its Occurrence and Uses** By E. B. Wilson. M & M, vol. 30, p 168. 4½ columns.
- THE RARE METALS: Columbium.** By C. Baskerville. E. & M. J., vol 86, p. 960. 2½ columns.
- LITHIUM AND ITS SOURCES.** By F. L. Hess. Min & Sci. Press, vol. 100, p. 822. 5 columns
- THE RARE METALS: Molybdenum.** By C. Baskerville. E. & M. J., vol 86, p. 1055. 2½ columns
- THE RARE METALS: Tantalum.** By C. Baskerville. E & M. J, vol 86, p. 1100. 2½ columns.
- THE RARE METALS: Titanium.** By C. Baskerville. E. & M J, vol. 87, p. 10. 4 columns
- THE RARE METALS: Thorium.** By C. Baskerville. E. & M. J, vol. 86, p. 1241. 4 columns
- RARE METALS: Uranium** By C. Baskerville. E. & M. J, vol. 87, p. 257. 4 columns.
- RARE METALS: Vanadium.** By C. Baskerville. E. & M. J., vol. 87, p. 518. 3 columns.
- THE PRESENT SOURCE AND USES OF VANADIUM** By J. K. Smith. T. A. I. M. E., vol. 38, p. 698 6 pages.
- FLUORSPAR GRADES AND MARKETS.** By F. J. Fohs. Min. & Sci. Press, vol. 99, p 720. 3½ columns.
- FLUORSPAR** By F. J. Fohs. Min. & Sci. Press, vol. 98, p. 888. 5 columns.
- PROPERTIES AND TESTS OF FULLER'S EARTH.** By J. T. Porter. U. S. G. S., Bull. 315, p. 268. 22½ pages, 1906.
- FULLER'S EARTH.** P. C. M. & M. Soc. S. A., vol. 9, p. 276. 1½ columns.
- FULLER'S EARTH.** M. & M, vol. 29, p. 54. 1½ columns. I.
- FULLER'S EARTH.** E. & M. J., vol. 87, p. 1000. 2 columns.
- NOTES ON VARIOUS GLASS SANDS, MAINLY UNDEVELOPED.** By E. F. Burchard. U S G S, Bull 315, p 377 6 pages 1906.
- THE REQUIREMENTS OF SAND AND LIMESTONE FOR GLASS MAKING** By E. F. Burchard. U. S. G. S., Bull. 285, p. 452. 7 pages. 1905.
- NATURAL GAS** By J. D. Weeks. U. S G S., Mineral Resources, 1886, vol. 8.
- NATURAL GAS** P. E. Soc. W Pa, vol 2, p. 331, 27½ pages, p 401, 10 pages
- THE GREATEST GEM MINE IN THE WORLD** P C M. & M. Soc. S A, vol. 7, p. 99. ½ column.
- LODES AND QUARTZ VEINS OF GOLD** By A. Waddington. Min Mag, vol 2, p. 21. 3 pages.
- THE GREAT GOLD MINES** By T. A. Rickard. Min & Sci. Press, vol 96, p. 10, 7½ columns, I, p. 161, 5½ columns, I.
- GRANITES** By G. Surr. Min & Sci Press, vol 99, p 712 5 columns. I
- GRAPHITE: Its Occurrence and Use** M. & M, vol 30, p. 394. 3½ columns. I.
- GYPSUM MINING.** By W. J. Jones. M. & M., vol. 29, p 490 1½ columns. I.
- THE SUPPLY OF IRON.** By J. F. Kemp. Min. Mag, London, vol 3, p 363 7 columns.
- THE SUPPLIES AND RESERVES OF IRON ORES.** By J. Birkinbine. J. C. M. I., vol. 10, p. 134. 14½ pages.
- MAGNETIC IRON ORE: Magnetite, Magnetic Oxide of Iron, and Lode-stone.** Min. Mag, vol. 4, p. 121. 14 pages.
- THE BLACK BAND, OR MUSHET IRON-STONE.** Min Mag, vol. 4, p 19 9½ pages.
- ON THE OCCURRENCE OF ORES OF IRON IN THE AZOIC SYSTEM.** By J. D. Whitney. Min. Mag., vol. 7, p. 67. 4 pages.

- FRANKLINITE IRON ORES: Their Uses and Quantity.** Min. Mag., vol. 10, p. 105. 4 pages.
- AGGLOMERATION OF MANGANIFEROUS LIMONITE ORE.** By F. Witte. E. & M. J., vol. 90, p. 216. 4½ columns I.
- LITHOGRAPHIC STONE.** By S. J. Kubel. U. S. G. S., Mineral Resources, 1900. 4 pages.
- LEAD INDUSTRY.** By C. Kirchoff, Jr. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- MANGANESE-ORE IN UNUSUAL FORM** By W. P. Blake. T. A. I. M. E., vol. 41, p. 647. 2½ pages.
- USES OF MANGANESE.** By E. C. Harder. U. S. G. S., Bull. 427, p. 243. 24 pages.
- See also UNITED STATES.
- MICA: Its Characteristics and Commerce.** E. & M. J., vol. 87, p. 941. 3 columns.
- PETROLEUM. Occurrence and Use.** By Max Livingston. P. E. Soc. W. Pa., vol. 2, p. 193. 14 columns.
- THE OIL-SHALES OF THE MARITIME PROVINCES** By R. W. Ellis. J. M. Soc. N. S., vol. 14, p. 1. 12½ pages.
- ECONOMIC POSSIBILITIES OF AMERICAN OIL SHALES.** By C. Baskerville. E. & M. J., vol. 88, p. 149, 15½ columns, I.; p. 195, 13½ columns, I.
- OCCURRENCE OF OIL AND GAS.** By W. Forstner. Min. & Sci. Press, vol. 101, p. 634. 8½ columns. I.
- CLASSIFICATION OF PETROLEUM AND NATURAL GAS FIELDS BASED ON STRUCTURE.** By F. G. Clapp. Min. & Sci. Press., vol. 101, p. 80. ½ column.
- S. PEARSON AND SON'S UNCONTROLLABLE OIL GUSEER.** E. & M. J., vol. 87, p. 7. 9 columns. I.
- THE USE OF GEOLOGICAL SCIENCE IN THE PETROLEUM AND NATURAL GAS BUSINESS.** By F. G. Clapp. P. E. Soc. W. Pa., vol. 26, p. 87. 34 pages. I.
- PLATINUM** By F. W. Horton. U. S. G. S., Mineral Resources, 1905. 12 pages.
- THE GEOLOGICAL RELATIONS AND DISTRIBUTION OF PLATINUM AND ASSOCIATED METALS** By J. F. Kemp. U. S. G. S., Bull. 193, 95 pages. I. 1902.
- PHOSPHATE CLAIMS ON PUBLIC LANDS.** Min. & Sci. Press, vol. 98, p. 862. 4½ columns.
- See also UNITED STATES.
- PHOSPHATE DEPOSITS OF OCEAN AND PLEASANT ISLANDS.** By F. D. Powers. T. A. I. M. E., vol. 10, p. 213. 20 pages. I.
- INVESTIGATION ON THE ROCK GUANO FROM THE ISLANDS OF THE CARIBBEAN SEA.** By W. J. Taylor. Min. Mag., vol. 8, p. 438. 11 pages.
- QUICKSILVER PRODUCTION IN FOREIGN COUNTRIES.** By H. W. Turner. Min. & Sci. Press, vol. 100, p. 16. 1½ columns.
- RARE MERCURY ORES.** By C. G. Dennis. Min. & Sci. Press, vol. 95, p. 92. 1 column. I.
- THE RUBY** By M. R. Ward. M. & M., vol. 31, p. 319. 3½ columns. I.
- BLACK SANDS.** By A. R. Townsend. E. & M. J., vol. 85, p. 307. 4½ columns.
- METALLIC SULPHIDES IN ALLUVIAL GOLD DEPOSITS.** By F. L. Garrison. Min. & Sci. Press, vol. 101, p. 812. 2 columns.
- SILVER: History and Mode of Occurrence.** By T. F. Van Wagenen. Min. & Sci. Press, vol. 97, p. 392. 7½ columns.
- A NEW SOURCE OF SUPPLY OF SULPHUR.** T. A. I. M. E., vol. 39, p. 522. 18 pages. I.
- BIBLIOGRAPHY OF TIN-DEPOSITS IN NORTH AMERICA.** T. A. I. M. E., vol. 38, p. 682. 1 page.
- See also UNITED STATES.

NIGERIAN TIN MINING E. & M. J., vol. 90, p. 1299. $\frac{1}{2}$ column.

TUNGSTEN: Its Occurrence and Use. M. & M., vol. 30, p. 387. $\frac{1}{2}$ column.

RARE METALS: Tungsten. By C. Baskerville E. & M. J., vol. 87, p. 203. $2\frac{1}{2}$ columns

Africa

SOUTH AFRICAN COALS AND THEIR ECONOMICS By A. J. Andrews. P. C. M. & M Soc S. A., vol. 9, p. 330, $9\frac{1}{2}$ columns; p. 391, 6 columns. D.

SOUTH AFRICAN COALS AND THEIR ECONOMICS. By A. J. Andrews. P. C. M. & M. Soc S. A., vol. 10, p. 92. 5 columns.

KATANGA COPPER BELT, BELGIAN CONGO. By F. E. Studt. Min. & Sci. Press, vol. 99, p. 857. $1\frac{1}{2}$ columns.

THE COPPER DEPOSITS OF KATANGA, CONGO. E. & M J, vol 86, p. 1049. 2 columns.

THE COPPER MINES OF KATANGA, CONGO FREE STATE E. & M. J., vol. 85, p. 202. $3\frac{1}{2}$ columns.

COPPER IN THE BELGIAN CONGO. T. A. I. M. E., vol. 41, p. 196. 8 pages. I.

THE DIAMOND INDUSTRY IN SOUTH AFRICA. E. & M. J., vol 85, p. 1106. $\frac{1}{2}$ columns.

SOUTH AFRICAN DIAMOND MINE. E. & M. J, vol. 87, p. 1240. $1\frac{1}{2}$ columns.

PREMIER DIAMOND MINE, NEAR PRETORIA, TRANSVAAL. By E. M. Weston. E. & M. J., vol. 89, p. 369. $10\frac{1}{2}$ columns. I.

VISIT TO PREMIER DIAMOND MINE. P. C. M. & M Soc S. A., vol. 9, p. 209. $5\frac{1}{2}$ columns. I.

DIAMOND MINING AT DE BEERS. P. C M & M. Soc. S A., vol. 7, p. 227. $4\frac{1}{2}$ columns.

THE ERUPTIVE DIAMOND-BEARING BRECCIAS OF THE BOSHOFF DISTRICT, SOUTH AFRICA. By J P Johnson T. I M. & M, vol 17, p. 277 8 pages.

DIAMOND MINES AND ALLUVIAL DEPOSITS, SOUTH AFRICA The Method Employed in Winning Diamonds on the Vaal River Alluvial Fields. By P. R. Day T Au I. M. E, vol 6, p. 87. 6 pages I.

ALLUVIAL DIAMOND MINING, SOUTH AFRICA. By P. B. Holte. M. & M, vol 29, p. 37. 2 columns. I.

SOME NOTES ON BANKET DEPOSITS, WITH SPECIAL REFERENCE TO THOSE MET WITH AT THE DENNY-DALTON GOLD FIELDS, VREYHEID DISTRICT, SOUTH AFRICAN REPUBLIC, AND THE PROCESS OF TREATMENT EMPLOYED THERE. By G A. Denny T Au I. M. E, vol 3, p. 75. 16 pages I

THE CROWN MINES, LTD M & M, vol 31, p. 691. $2\frac{1}{2}$ columns

CONSOLIDATED GOLD FIELDS OF SOUTH AFRICA, LTD By E M Weston. E. & M J, vol 85, p. 355. $3\frac{1}{2}$ columns. I.

THE ROBINSON MINE, SOUTH AFRICA. By J. B. Pritchford. Min. & Sci. Press, vol 97, p. 606. 5 columns

PRESENT MINING CONDITIONS ON THE RAND: Discussion of the paper of Thomas H. Leggett, p. 211. T. A. I. M. E., vol. 39, p. 856. $2\frac{1}{2}$ pages.

NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 8, p. 255, 23 columns, I.; p. 305, 1 column; p. 346, $12\frac{1}{2}$ columns; p. 381, 3 columns; vol 9, p. 13, 15 columns, I.; p. 48, 1 column, p. 82, 24 columns, I.

THE GREAT MINES OF THE RAND. By T. A. Rickard. Min. Mag., London, vol. 2, p. 213. $7\frac{1}{2}$ columns. I.

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M. E, vol 39, p. 211. $12\frac{1}{2}$ pages.

- REMINISCENCES OF THE EARLY RAND. By M. H. Coombe. P. C. M. & M Soc. S. A., vol. 9, p. 38, 7½ columns; p. 123, 5 columns; p. 204, 4 columns; p. 227, 10 columns, I.; p. 272, 5 columns
- PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. E. & M J., vol. 85, p. 1239. 10 columns
- FURTHER NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 10, p. 276, 11½ columns, I.; p. 319, 1½ columns; p. 449, 6 columns; p. 394, 8½ columns, I.
- REMINISCENCES OF THE EARLY RAND. By J. S. MacArthur. E. & M J., vol. 88, p. 357 4½ columns.
- MINING CONDITIONS ON THE RAND. By T. H. Leggett. Min. & Sci. Press, vol. 96, p. 812. 9½ columns. I
- THE PRINCIPAL MINES OF THE TRANSVAAL. Min. & Sci. Press, vol. 96, p. 10 2 columns. Table.
- VISITING THE GOLD COAST, WEST AFRICA. By F. F. Sharpless. Min. & Sci. Press, vol. 101, p. 800. 7 columns Map.
- A WEST AFRICAN GOLD MINE. E. & M J., vol. 87, p. 1005 1½ columns.
- THE WEST AFRICAN GOLDFIELD. E. & M J., vol. 87, p. 905. 1 column.
- WEST AFRICA, THE GOLD COAST COLONY, AND ASHANTI IN 1908. By W. F. Wilkinson. E. & M J., vol. 87, p. 196. 3½ columns.
- EARLY DAYS ON THE GOLD COAST. By E. T. McCarthy. Min. Mag., London, vol. 1, p. 291. 6½ columns.
- WEST AFRICAN MINES. By J. H. Curle. Min. Mag., London, vol. 1, p. 42. 6 columns. I.
- GOLD MINING IN WEST AFRICA. E. & M. J., vol. 85, p. 1282. 1 column.
- THE BARBERTON GOLDFIELD IN SWAZILAND. E. & M. J., vol. 89, p. 669. 2½ columns.
- THE BARBERTON GOLDFIELD, SOUTH AFRICA. By A. Richardson. P. C. M. & M. Soc. S. A., vol. 10, p. 122 25 columns.
- THE PILGRIM'S REST GOLD FIELDS AND MINING METHODS. By J. Moyle-Phillips. P. C. M. & M Soc S. A., vol. 9, p. 293, 16 columns, I.; p. 349, 3½ columns; p. 395, 2 columns, I.
- NOTES ON THE GOLD OF THE ROODEPOORT DISTRICT. By G. Andrioli. J. C. M. & M. Soc S. A., vol. 5, p. 73, 4 columns; p. 152, 1 column.
- MINING IN SOUTHERN RHODESIA. By A. H. Ackermann. Min. Mag., London, vol. 2, p. 138. 6 columns. I.
- SMALL MINES OF RHODESIA. By B. I. Collings. P. C. M. & M. Soc S. A., vol. 9, p. 76, 10 column; p. 126, 5½ columns; p. 166, 2½ columns; p. 206, 2 columns; p. 275, 1½ columns.
- STAR OF THE CONGO MINE. Min. & Sci. Press, vol. 100, p. 260. ½ columns. I.
- MINING-CONDITIONS IN THE BELGIAN CONGO (CONGO FREE STATE). By S. H. Ball and M. K. Shaler. T. A. I. M. E., vol. 41, p. 189. 9 pages. I.
- THE NEW GOCH GOLD MINES, LTD. P. C. M. & M Soc S. A., vol. 5, p. 57. 10 columns
- IRON IN THE BELGIAN CONGO. T. A. I. M. E., vol. 41, p. 210. 4 pages.
- OILS OF WEST AFRICA. E. & M. J., vol. 87, p. 1037. 3 columns.
- BITUMEN AND OILS IN WEST AFRICA. By T. H. Bootman. E. & M. J., vol. 87, p. 1037. 3 columns.
- THE SOUTH AFRICAN TIN-DEPOSITS. By W. R. Humboldt. T. A. I. M. E., vol. 39, p. 783. 7 pages. I.
- TIN DEPOSITS OF THE TRANSVAAL. E. & M. J., vol. 88, p. 778. 2½ columns.
- NOTES ON TIN MINING IN CAPE COLONY. By H. D. Griffiths. P. C. M. & M. Soc S. A., vol. 8, p. 167, 28 columns. I.

TIN MINING AND ORE DRESSING IN SOUTH AFRICA. By E. M. Weston. E. & M. J., vol. 89, p. 411, 7½ columns, I; p. 470, 7 columns, I; p. 573, 7 columns, I.

TIN IN THE BELGIAN CONGO T. A. I. M. E., vol. 41, p. 209. 2 pages. I.

THE GROENFONTEIN TIN MINES. By E. M. Weston E. & M. J., vol. 90, p. 515. ¾ column. I.

PHOSPHATES IN TUNIS. E. & M. J., vol. 88, p. 177. 1½ columns.

THE MINING INDUSTRY IN ALGERIA AND TUNIS By M. Clere. E. & M. J., vol. 88, p. 460 9½ columns I.

See also MISCELLANEOUS PRODUCTION.

Alabama

ECONOMIC FEATURES OF THE BIRMINGHAM DISTRICT. By J. L. Pultz. E. & M. J., vol. 88, p. 299 15 columns. I.

OPERATING COMPANIES OF BIRMINGHAM DISTRICT. By J. L. Pultz. E. & M. J., vol. 88, p. 345. 11½ columns. I.

THE CLAYS AND OTHERS OF ALABAMA. By E. A. Smith. E. & M. J., vol. 85, p. 1088. ¾ column

See also OCCURRENCE OF IRON ORES.

CLAYS OF THE BIRMINGHAM DISTRICT, ALABAMA. By C. Butts. U. S. G. S., Bull. 315, p. 291. 4 pages 1906.

FUELS OF THE BIRMINGHAM DISTRICT, ALABAMA. By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400, 204 pages. I. 1910.

THE WARRIOR COAL BASIN IN THE BIRMINGHAM QUADRANGLE, ALABAMA. By C. Butts. U. S. G. S., Bull. 285, p. 211. 12 pages. I. 1905.

LAHAUSAGE MINE, ALABAMA. By A. W. Evans. M. & M., vol. 30. p. 77. 4½ columns I.

THE COOSA COAL FIELD OF ALABAMA. By W. F. Prouty. E. & M. J., vol. 88, p. 921. 4 columns. I. Sections and Maps

THE NORTHERN PART OF THE COHABA COAL FIELD, ALABAMA. By C. Butts U. S. G. S., Bull. 316, p. 76. 40 pages. I. 1906.

NOTES ON SOME GOLD DEPOSITS OF ALABAMA. By H. D. McCaskey. U. S. G. S., Bull. 340, p. 36. 17 pages. 1907.

IRON ORES, FUELS AND FLUXES OF THE BIRMINGHAM DISTRICT, ALABAMA. By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910.

IRON OPERATIONS OF THE BIRMINGHAM DISTRICT By E. Higgins. E. & M. J., vol. 86, p. 1043. 18½ columns. I.

IRON OPERATIONS IN NORTHEASTERN ALABAMA. By E. Higgins. E. & M. J., vol. 86, p. 1083. 12 columns. I.

THE IRON ORE INDUSTRY IN ALABAMA. By E. A. Smith E. & M. J., vol. 85, p. 1159. 4 columns.

AN ESTIMATE ON THE TONNAGE OF AVAILABLE CLINTON IRON ORE IN THE BIRMINGHAM DISTRICT, ALABAMA. By E. F. Burchard. U. S. G. S., Bull. 340, p. 308 10 pages. I. 1907.

THE CLINTON OR RED ORES OF THE BIRMINGHAM DISTRICT, ALABAMA. By E. F. Burchard. U. S. G. S., Bull. 315, p. 130. 21½ pages. 1906

THE CLINTON IRON-ORE DEPOSITS OF ALABAMA. By E. F. Burchard T. A. I. M. E., vol. 40. p. 75. 59 pages I.

THE BROWN IRON ORES OF THE RUSSELLVILLE DISTRICT, ALABAMA. By E. F. Burchard. U. S. G. S., Bull. 315, p. 152 7 pages 1906.

THE GRAY IRON ORES OF TALLADEGA COUNTY, ALABAMA By P. S. Smith. U. S. G. S., Bull. 315, p. 161 23½ pages. 1906.

LIMESTONE AND DOLOMITE IN THE BIRMINGHAM DISTRICT, ALABAMA. By C. Butts U. S. G. S., Bull. 315, p. 247. 9 pages. 1906.

SAND-LIME BRICKMAKING NEAR BIRMINGHAM, ALABAMA. By C. Butts. U. S. G. S., Bull. 315, p. 256. 2 pages. 1906.

KELLERMAN MINE, KELLERMAN, ALABAMA. By N. Hutchins. M. & M., vol. 31, p. 204. 4½ columns. I.

Alaska

GEOGRAPHICAL DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 187. 446 pages. 1901.

GEOGRAPHIC DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 299. 690 pages. 1906.

THE GEOGRAPHY AND GEOLOGY OF ALASKA. By A. H. Brooks. U. S. G. S., Professional Paper 45. 327 pages. I. 1906.

ALASKAN GEOGRAPHIC NAMES. By M. Baker. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 487-509, 1899-1900.

RECENT DEVELOPMENTS IN MINING IN THE SOUTHERN YUKON. By D. D. Cairnes. J. C. M. I., vol. 10, p. 207. 9 pages.

ECONOMIC DEVELOPMENTS IN SOUTHEASTERN ALASKA. By F. E. and C. W. Wright. U. S. G. S., Bull. 259, p. 47. 21½ pages.

MINING IN SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 379, p. 67. 20 pages. I. 1908.

MINING IN SOUTHEASTERN ALASKA. By A. Knopf. U. S. G. S., Bull. 442, p. 133. 11 pages. 1909.

THE MINING INDUSTRY OF 1908. By A. H. Brooks. U. S. G. S., Bull. 379, p. 21. 44 pages. I. 1908.

THE MINING INDUSTRY OF ALASKA IN 1909. By A. H. Brooks. U. S. G. S., Bull. 442, p. 20. 27 pages. 1909.

OUTLINE OF THE GEOLOGY AND MINERAL RESOURCES OF THE ILLIAMNA AND CLARK LAKES REGION. By G. C. Martin and F. J. Katz. U. S. G. S., Bull. 442, p. 179. 22 pages. I. 1909.

GEOLOGY AND MINERAL RESOURCES OF THE BERNERS BAY REGION, ALASKA. By A. Knopf. U. S. G. S., Bull. 446, 58 pages. I.

MINERAL RESOURCES OF KATSINACHITINA REGION, ALASKA. By F. H. Moffit and A. G. Maddren. U. S. G. S., Bull. 374, 103 pages. I. 1909.

MINERAL RESOURCES OF ALASKA IN 1907. By A. H. Brooks. U. S. G. S., Bull. 345. 294 pages. I. 1908.

MINERAL RESOURCES OF THE NULATO-COUNCIL REGION, ALASKA. By P. S. Smith and H. M. Eakin. U. S. G. S., Bull. 442, p. 316. 37 pages. I. 1909.

PRELIMINARY REPORT ON THE MINERAL RESOURCES OF THE SOUTHERN PART OF KENAI PENINSULA, ALASKA. By G. S. Grant and D. F. Higgins. U. S. G. S., Bull. 442, p. 166. 11 pages. I. 1909.

MINERAL RESOURCES OF SOUTHWESTERN ALASKA. By W. W. Atwood. U. S. G. S., Bull. 379, p. 108. 44 pages. I. 1908.

MAP OF CENTRAL ALASKA SHOWING DISTRIBUTION OF MINERAL RESOURCES. U. S. G. S., Bull. 379, p. 24. I. 1908.

THE MINERAL RESOURCES OF THE KOTSINA AND CHITINA VALLEYS, COPPER RIVER REGION, ALASKA. By F. H. Moffit and A. G. Maddren. U. S. G. S., Bull. 345, p. 127. 50 pages. I. 1907.

THE DISTRIBUTION OF MINERAL RESOURCES IN ALASKA. By A. H. Brooks. U. S. G. S., Bull. 345, p. 18. 12 pages. 1907.

THE COPPER RIVER DISTRICT, ALASKA. By H. A. Keller. E. & M. J., vol. 85, p. 1273. 10½ columns. I.

SOME NOTES ON THE COPPER RIVER DISTRICT, ALASKA. By W. M. Brewer. J. C. M. I., vol. 11, p. 415. 8 pages. I.

THE GEOLOGY AND MINERAL RESOURCES OF A PORTION OF THE COPPER RIVER DISTRICT, ALASKA. By

- F. C. Schrader and A. C. Spencer. U. S. G. S., Special Publications, 1901. 94 pages. I.
- THE COPPER RIVER DISTRICT, ALASKA. By W. M. Brewer. Min. & Sci. Press, vol 96, p. 71, 4 columns, I.; p. 101, 2½ columns.
- KETCHIKAN AND WRANGELL MINING DISTRICTS, ALASKA. By F. E. and C. W. Wright. U. S. G. S., Bull 347. 210 pages. I. 1908
- MINERAL RESOURCES OF THE MOUNT WRANGELL DISTRICT, ALASKA. By W. C. Mendenhall and F. C. Schrader. U. S. G. S., Professional Paper 15. 71 pages. I. 1903.
- MINING IN THE WRANGELL DISTRICT, ALASKA. Min & Sci Press, vol. 96, p. 199. 5½ columns. I.
- A RECONNAISSANCE OF THE CAPE NOME AND ADJACENT GOLD FIELDS OF SEWARD PENINSULA, ALASKA, IN 1900. By A. H. Brooks, G. B. Richardson, and A. J. Collier. U. S. G. S., Special Publications, 1900. 222 pages. I.
- RECONNAISSANCE OF THE GEOLOGY AND MINERAL RESOURCES OF PRINCE WILLIAM SOUND, ALASKA. By U. S. Grant and D. F. Higgins. U. S. G. S., Bull. 443. 89 pages. I. 1910.
- GEOLOGY AND MINERAL RESOURCES OF THE SOLOMON AND CASCADE-PAGO QUADRANGLES, SEWARD PENINSULA, ALASKA. By P. S. Smith. U. S. G. S., Bull. 433. 234 pages I.
- MINING IN SEWARD PENINSULA. By F. F. Henshaw. U. S. G. S., Bull. 442, p. 353. 18 pages. 1909.
- RECENT DEVELOPMENTS IN SOUTHERN SEWARD PENINSULA. By P. S. Smith. U. S. G. S., Bull. 379, p. 267. 35 pages. I. 1908.
- NOTES ON THE GEOLOGY AND MINERAL PROSPECTS IN THE VICINITY OF SEWARD, KENAI PENINSULA. By U. S. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 98. 10 pages. I. 1908.
- INVESTIGATIONS OF THE MINERAL DEPOSITS OF SEWARD PENINSULA, ALASKA. By P. S. Smith. U. S. G. S., Bull. 345, p. 206. 44 pages I. 1907.
- THE MINERAL DEPOSITS OF THE LOST RIVER AND BROOKS MOUNTAIN REGION, SEWARD PENINSULA, ALASKA. By A. Knopf. U. S. G. S., Bull. 345, p. 268. 4 pages. 1907.
- GEOLOGY AND MINERAL RESOURCES OF IRON CREEK, ALASKA. By P. S. Smith. U. S. G. S., Bull. 314, p. 157. 7 pages I. 1906
- A RECONNAISSANCE IN THE NORTON BAY REGION, ALASKA, IN 1900. By W. C. A. Mendenhall. U. S. G. S., Special Publications, 1900. 222 pages. I.
- MINERAL RESOURCES OF THE NABESNA-WHITE RIVER DISTRICT, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 417. 64 pages. I. 1910.
- THE FORTYMILE QUADRANGLE, YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 375. 52 pages I. 1909.
- THE FAIRBANKS AND RAWPORT QUADRANGLE, YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 337. 102 pages. I. 1908.
- GEOLOGY AND MINERAL RESOURCES OF THE CONTROLLER BAY REGION, ALASKA. By G. C. Martin. U. S. G. S., Bull. 335. 141 pages I. 1908.
- THE CIRCLE PRECINCT, ALASKA. By A. H. Brooks. U. S. G. S., Bull. 314, p. 187. 18 pages 1906.
- THE YUKON-TANANA REGION, ALASKA. Description of Circle Quadrangle. By L. M. Prindle. U. S. G. S., Bull. 295. 27 pages. I. 1906.
- MINERAL RESOURCES OF THE KENAI PENINSULA, ALASKA. By F. H. H. Moffit. U. S. G. S., Bull. 277. 88 pages I. 1906
- MINING IN THE CHITINA DISTRICT, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 442, p. 158. 6 pages. 1909.

- MINERAL RESOURCES OF THE NABESNA-WHITE RIVER DISTRICT, ALASKA. By F. H. Moffit and A. Knopf. U. S. G. S., Bull. 379, p. 161. 20 pages. I. 1908.
- MINING IN THE KOTSINA-CHITINA, CHISTOCHINA, AND VALDEZ CREEK REGIONS. By F. H. Moffit. U. S. G. S., Bull. 379, p. 153. 8 pages. I. 1908.
- THE KONGARCK REGION, ALASKA. By A. H. Brooks. U. S. G. S., Bull. 314, p. 164. 16 pages. I. 1906.
- THE BONNIFIELD AND KANTISHNA REGIONS, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 314, p. 205. 22 pages. I. 1906.
- RECONNAISSANCE ON THE PACIFIC COAST FROM YOKUTAT TO ALSEK RIVER. By G. Blackwelder. U. S. G. S., Bull. 314, p. 82. 7 pages. 1906.
- YUKON TERRITORY WEST OF LEWIS RIVER. By D. D. Cairnes. Min. & Sci. Press, vol. 99, p. 29. 2 columns.
- THE WHEATON RIVER ANTIMONY DEPOSITS, YUKON TERRITORY. By D. D. Cairnes. J. C. M. I., vol. 13, p. 297. 11½ pages. I.
- NONMETALLIFEROUS MINERAL RESOURCES OF SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 314, p. 73. 8 pages. 1906.
- THE ALASKA COAL FIELDS. By G. C. Martin. U. S. G. S., Bull. 314, p. 40. 7 pages. I. 1906.
- ALASKA COAL AND ITS UTILIZATION. By A. H. Brooks. U. S. G. S., Bull. 442, p. 47. 54 pages. I. 1909.
- COAL RESOURCES OF SOUTHWESTERN ALASKA. By R. W. Stone. U. S. G. S., Bull. 259, p. 151. 21 pages. I.
- BERING RIVER COAL FIELD. By G. C. Martin. U. S. G. S., Bull. 259, p. 140. 10½ pages. I.
- THE BERING RIVER COALFIELD OF ALASKA. By L. W. Storm. E. & M. J., vol. 90, p. 272. 9½ columns. I.
- THE BERING RIVER COAL DEPOSITS, ALASKA. By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905.
- CONTROLLER BAY COAL FIELD, ALASKA. By G. W. Evans. M. & M., vol. 30, p. 449, 8 columns, I.; p. 552, 6½ columns. I.
- COAL FIELDS OF THE CAPE LISBURNE REGION, ALASKA. By A. J. Collier. U. S. G. S., Bull. 259, p. 172. 3½ pages.
- COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA. By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- GEOLOGY AND COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA. By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- COAL DEPOSITS OF THE SKEENA RIVER. J. C. M. I., vol. 10, p. 223. 6 pages. Map.
- THE COAL FIELDS OF THE KACHEMAK BAY REGION. By R. W. Stone. U. S. G. S., Bull. 277. 88 pages. I. 1906.
- A RECONNAISSANCE OF THE MATANUSKA COAL FIELD, ALASKA, IN 1905. By G. C. Martin. U. S. G. S., Bull. 289. 36 pages. I. 1906.
- COPPER DEPOSITS OF PRINCE WILLIAM SOUND, ALASKA. By U. S. Grant. Min. & Sci. Press, vol. 100, p. 63. 4 columns. I.
- COPPER MINING AND PROSPECTING OF PRINCE WILLIAM SOUND. By U. S. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 87. 10 pages. I. 1908.
- NOTES ON COPPER PROSPECTS OF PRINCE WILLIAM SOUND. By F. H. Moffit. U. S. G. S., Bull. 345, p. 176. 3 pages. I. 1907.
- OPENING OF THE CHITINA COPPER BELT IN ALASKA. By D. Donohoe. E. & M. J., vol. 90, p. 1306. 6 columns. I.
- CHITINA COPPER REGION IN SOUTHERN ALASKA. By L. W. Storm. E. & M. J., vol. 90, p. 1011. 7½ columns. Map.

- CHITINA VALLEY COPPER DEPOSITS, ALASKA. By E Jacobs M. & M., vol 31, p. 315. 6½ columns I.
- OCCURRENCE OF COPPER IN CHITINA VALLEY, ALASKA. M. & M., vol. 31, p. 315 6½ columns I.
- BONANZA COPPER MINE, ALASKA. By U. H Wilhelm Min & Sci. Press, vol. 101, p 569 2½ columns. I.
- BONANZA COPPER MINE, ALASKA. By U H. Wilhelm M. & M., vol. 31, p 441. 1½ columns Map
- COPPER DEPOSITS OF WHITE HORSE. By T. A Rickard. Min. & Sci. Press, vol 97, p. 778 3½ columns. I.
- THE WHITEHORSE COPPER BELT, YUKON TERRITORY. E. & M. J., vol. 89, p. 963. 2½ columns.
- WHITE RIVER COPPER PROPERTIES. By G A. R. Lewington Min. & Sci. Press, vol. 99, p. 755. 2½ columns. I.
- THE KENNICOTT BONANZA COPPER MINE, ALASKA. By L. W. Storm. E & M J, vol. 89, p. 1224. 9½ columns. I.
- COPPER DEPOSITS ON KASAAN PENINSULA, PRINCE OF WALES ISLAND. By C. W. Wright and S. Paige U. S. G. S., Bull. 345, p. 98 18 pages. I. 1907.
- SOME ECONOMIC GOLD DEPOSITS OF ALASKA. By F. C. Lincoln. E. & M. J., vol. 90, p. 551. 11 columns.
- GOLD MINING IN ALASKA. By A. H. Brooks. E. & M. J., vol. 85, p. 311. 3 columns.
- AURIFEROUS QUARTZ VEINS IN THE FAIRBANKS DISTRICT, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 442, p. 210. 20 pages. I. 1909.
- AURIFEROUS QUARTZ VEINS ON UNALASKA ISLAND. By A J. Collier. U. S. G. S., Bull. 259, p. 102. 2 pages.
- GOLD DEPOSITS OF THE SHUMAGIN ISLANDS. By G. C. Martin U. S. G. S., Bull 259, p. 100. 2 pages.
- OCCURRENCE OF GOLD IN TREADWELL ORE DEPOSITS U. S. G. S., Bull. 259, p. 82. ¼ page.
- THE ALASKA - TREADWELL MINES. Min. Mag, London, vol. 2, p 142, 2 columns, I; vol. 3, p. 278, 4 columns, I.
- THE TREADWELL ORE DEPOSITS. Min. & Sci Press, vol. 95, p 117 6½ columns. I
- THE TREADWELL GROUP OF MINES. By A. C. Spencer. Min. & Sci. Press, vol 95, p. 117 6½ columns I.
- THE JUNEAU GOLD BELT, ALASKA. By A. C Spencer. U. S G S, Bull. 287. 161 pages. I. 1906.
- LODE MINING IN SOUTHEASTERN ALASKA, 1907. By C. W Wright. U. S. G. S., Bull. 345, p 78. 20 pages. I. 1907.
- LODE MINING IN SOUTHEASTERN ALASKA. By C W Wright. U S. G. S., Bull. 314, p. 47. 28 pages. I. 1906.
- YAKUTAT BAY REGION Min. & Sci. Press, vol. 99, p 719. 1 column.
- MINING ON PRINCE OF WALES ISLAND, ALASKA. By W. A Scott. Min. & Sci. Press, vol. 98, p. 885. 3½ columns I.
- MINING AT SHUNGUAK, ALASKA By L. Lloyd. Min. & Sci. Press, vol. 101, p. 109. 2 columns. I
- The KOYNKUK-CHANDLAR GOLD REGION, ALASKA By A. G Maddren. U. S. G. S., Bull. 442, p. 284. 32 pages I. 1909
- GOLD OF PRINCE WILLIAM SOUND By U. S. Grant. U. S. G. S., Bull. 379, p. 97. 1 page. 1908.
- GOLD FIELDS OF THE SOLOMON AND NINKLUK RIVER BASINS By P. S. Smith. U. S G. S., Bull. 314, p. 146. 11 pages. 1906.
- OCCURRENCE OF GOLD IN THE YUKON-TANANA REGION, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 345, p. 179. 10 pages. I. 1907.

- PLACER GOLD DEPOSITS OF ALASKA. E. & M. J., vol. 90, p. 551. 6 columns.
- NEW PLACES IN ALASKA. Min. & Sci. Press, vol. 97, p. 842. 2 columns. Map.
- RAMPART PLACER REGION. By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 259, p. 104. 15 pages.
- THE RAMPART PLACER, YUKON-TANANA REGION, ALASKA. By F. J. Hess. U. S. G. S., Bull. 337. 102 pages. I. 1908.
- THE RAMPART GOLD PLACER REGION, ALASKA. By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 280. 54 pages. I. 1906.
- THE GOLD PLACERS OF THE FORTY-MILE, BIRCH CREEK, AND FAIRBANKS REGIONS, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 251. 89 pages. I. 1905.
- THE FORTYMILE GOLD-PLACER DISTRICT, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 345, p. 187. 12 pages. 1907.
- THE INNOKO GOLD-PLACER DISTRICT, ALASKA; WITH ACCOUNTS OF THE CENTRAL KUSKOKWIN VALLEY AND THE RUBY CREEK AND GOLD HILL PLACERS. By A. G. Maddren. U. S. G. S., Bull. 410. 87 pages. I. 1910.
- GOLD PLACERS OF THE INNOKO DISTRICT. By A. G. Maddren. U. S. G. S., Bull. 379, p. 238. 29 pages. 1908.
- PRELIMINARY REPORT ON THE CAPE NOME GOLD REGION, ALASKA. By F. C. Schrader and A. H. Brooks. U. S. G. S., Special Publications, 1900. 56 pages. I.
- THE NOME REGION, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 314, p. 126. 18 pages. I. 1906.
- THE GOLD PLACERS OF TURNAGAIN ARM. By F. H. Moffit. U. S. G. S., Bull. 259, p. 90. 9 pages. I.
- THE CAPE YAKTAZ PLACERS. By G. C. Martin. U. S. G. S., Bull. 259, p. 88. 2 pages.
- THE IRON CREEK REGION. By P. S. Smith. U. S. G. S., Bull. 379, p. 302. 53 pages. I. 1908.
- PLACERS OF THE GOLD HILL DISTRICT. By A. G. Maddren. U. S. G. S., Bull. 379, p. 234. 3 pages. 1908.
- GOLD PLACERS OF THE RUBY CREEK DISTRICT. By A. G. Maddren. U. S. G. S., Bull. 379, p. 229. 5 pages. I. 1908.
- THE GOLD PLACERS OF PARTS OF SEWARD PENINSULA, ALASKA, INCLUDING THE NOME, COUNCIL, KOUGAROK, PORT CLARENCE AND GOODHOPE PRECINCTS. By A. J. Collier. U. S. G. S., Bull. 328. 343 pages. I. 1908.
- THE FAIRBANKS GOLD PLACER REGION. By L. M. Prindle and F. J. Katz. U. S. G. S., Bull. 379, p. 181. 20 pages. I. 1908.
- YUKON GOLD. By O. B. Perry. Min. & Sci. Press, vol. 96, p. 556. 3 columns.
- THE PORCUPINE PLACER DISTRICT, ALASKA. By C. W. Wright. U. S. G. S., Bull. 236. 35 pages. I. 1904.
- THE FAIRHAVEN GOLD PLACERS OF THE SEWARD PENINSULA, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 247. 85 pages. I. 1905.
- GOLD PLACERS OF THE MULCHATNA, ALASKA. By F. J. Katz. U. S. G. S., Bull. 442, p. 201. 1½ pages. 1909.
- PELLEY ROSS AND GRAVEL RIVERS. By J. Keele. Min. & Sci. Press, vol. 99, p. 66. 2 columns.
- HAINES DISTRICT, ALASKA. By W. A. Scott. Min. & Sci. Press, vol. 99, p. 198. 2½ columns. I.
- THE OCCURRENCE OF IRON ORE NEAR HAINES, SOUTHEASTERN ALASKA. By A. Knopf. U. S. G. S., Bull. 442, p. 144. 3 pages. 1909.
- THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 379, p. 63. 4 pages. 1908.
- THE PREPARATION AND USE OF PEAT AS FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 442, p. 101. 32 pages. 1909.

See also THE UNITED STATES.

NOTES ON THE PETROLEUM FIELDS OF ALASKA. By G. C. Martin. U. S. G. S., Bull. 259, p. 128. 11½ pages. I.

PETROLEUM AT CONTROLLER BAY. By G. C. Martin. U. S. G. S., Bull. 314, p. 89. 35 pages. I. 1906

THE PETROLEUM FIELDS OF THE PACIFIC COAST OF ALASKA, WITH AN ACCOUNT OF THE BERING RIVER COAL DEPOSIT. By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905

KATALA, ALASKA, OIL FIELD. By W. T. Prosser. M. & M., vol. 31, p. 731. 1½ columns.

THE BUILDING STONES AND MATERIALS OF SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 345, p. 116. 10 pages. 1907.

MAKUSHIN SULPHUR DEPOSITS, UNALASKA. By N. O. Lawton. Min. & Sci. Press, vol. 98, p. 258. 4 columns. I.

RECENT DEVELOPMENT OF ALASKAN TIN DEPOSITS. By A. J. Collier. U. S. G. S., Bull. 259, p. 120. 7½ pages. I.

TIN IN YORK REGION, ALASKA. By A. H. Brooks. U. S. G. S., Mineral Resources. 1900.

GEOLOGY OF THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 358. 72 pages. I. 1908.

THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 345, p. 251. 18 pages. I. 1907.

TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. Min. & Sci. Press, vol. 95, p. 744. 6 columns. I.

TIN-DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. T. A. I. M. E., vol. 38, p. 669. 9 pages. I.

OCCURRENCE OF WOLFRAMITE AND CASSITERITE IN THE GOLD PLACERS

OF DEADWOOD CREEK, BIRCH CREEK DISTRICT, ALASKA. By B. L. Johnson. U. S. G. S., Bull. 442, p. 246. 5 pages. 1909.

Argentine Republic

MINING IN THE ARGENTINE. By C. Janin. Min. & Sci. Press, vol. 101, p. 574. 4 columns. Map.

PLACERS OF TIERRA DEL FUEGO. By S. H. Loram. Min. & Sci. Press, vol. 99, p. 125. 6½ columns.

Arizona

THE MINERAL DEPOSITS OF THE CERBAT RANGE, BLACK MOUNTAINS, AND GRAND WASH CLIFFS, MOHAVE COUNTY, ARIZONA. By F. C. Schrader. U. S. G. S., Bull. 340, p. 53. 31 pages. I. 1907.

THE ORE DEPOSITS OF SOUTHERN ARIZONA. Min. & Sci. Press, vol. 99, p. 359. 1 column.

A RECONNAISSANCE OF PARTS OF NORTHWESTERN NEW MEXICO AND NORTHERN ARIZONA. By N. H. Darton. U. S. G. S., Bull. 435, 88 pages. I. 1910

THE GILA RIVER ALUM DEPOSITS. By C. W. Hays. U. S. G. S., Bull. 315, p. 215. 10 pages. I. 1906.

NOTES ON THE OCCURRENCE OF CINABAR IN CENTRAL WESTERN ARIZONA. By W. Bancroft. U. S. G. S., Bull. 430, p. 151. 3 pages. 1909.

THE CLIFTON-MORENCI DISTRICT OF ARIZONA. By W. L. Tovote. Min. & Sci. Press, vol. 101, p. 770, 6½ columns, Map; p. 831, 12 columns. I.

RECENT DEVELOPMENTS IN CLIFTON-MORENCI DISTRICT, ARIZONA. By A. W. Hixson. E. & M. J., vol. 85, p. 251. 1½ columns.

COPPER DEPOSITS OF SILVERBELL, ARIZONA. By C. F. Tolman. Min. & Sci. Press, vol. 99, p. 710. 5 columns. I.

- THE MIAMI COPPER MINE, ARIZONA.** By R. L. Herrick. M. & M., vol. 30, p. 80. 9½ columns. I.
- MINING AT MIAMI, ARIZONA.** By R. L. Herrick. M. & M., vol. 30, p. 751. 12 columns. I.
- COPPER MINING IN METCALF DISTRICT, ARIZONA.** By P. B. Scotland. E. & M. J., vol. 90, p. 118. 16 columns. I.
- DISSEMINATED CHALCOCITE DEPOSITS AT RAY, ARIZONA.** By C. F. Tolman, Jr. Min. & Sci. Press, vol. 99, p. 622. 5½ columns. I.
- RAY COPPER DISTRICT, ARIZONA.** By W. H. Truesdale. Min. & Sci. Press, vol. 98, p. 794. 7½ columns. I.
- UNITED VERDE MINE, ARIZONA.** By L. C. Craton. Min. & Sci. Press, vol. 96, p. 171. 1½ columns. Map.
- ORE DEPOSITS IN THE VICINITY OF PARKER, ARIZONA.** E. & M. J., vol. 88, p. 1171. 2 columns.
- THE SUPERIOR AND BOSTON MINE, ARIZONA.** By R. L. Herrick. M. & M., vol. 31, p. 112. 8½ columns. I.
- COPPER DEPOSITS OF THE GLOBE-KELVIN DISTRICTS, ARIZONA.** By E. Higgins. E. & M. J., vol. 89, p. 769, 11 columns, I.; p. 813, 9½ columns, I.; p. 870, 13½ columns, I.
- THE BISBEE COPPER FIELD.** Min. & Sci. Press, vol. 99, p. 358. 3 columns. I.
- STANLEY BUTTE DISTRICT, ARIZONA.** By F. Wolf, Jr. Min. & Sci. Press, vol. 101, p. 13. 1½ volumes. Map.
- COURTLAND ARIZONA, A NEW CAMP.** By H. W. Chittenden. E. & M. J., vol. 87, p. 312. 1½ columns.
- THE SOUTHERN ARIZONA COPPER FIELDS.** By C. F. Tolman, Jr. Min. & Sci. Press., vol. 99, p. 356, 10 columns, I.; p. 390, 7½ columns, I.
- THE OCTAVE MINE, ARIZONA.** By J. E. Russell. E. & M. J., vol. 85, p. 211. 1½ columns. I.
- THE GOLD ROAD MINE, ARIZONA.** By J. C. Kennedy. Min. & Sci. Press, vol. 101, p. 773. 1½ columns.
- NOTES ON THE PLACER DEPOSITS OF GREATERVILLE, ARIZONA.** By J. M. Hill. U. S. C. S., Bull. 430, p. 11. 12 pages. I. 1909.
- MARBLE PROSPECTS IN THE CHIRICAHUA MOUNTAINS, ARIZONA.** By S. Paige. U. S. G. S., Bull. 380, p. 299. 13 pages. I. 1908.
- SOME OCCURRENCES OF MOLYBDENITE IN THE SANTA RITA AND PATAGONIA MOUNTAINS, ARIZONA.** By F. C. Schrader and J. M. Hill. U. S. G. S., Bull. 430, p. 154. 10 pages. I. 1909.
- A SILVER BEARING DIORITE IN SOUTHERN ARIZONA.** By J. Bond. E. & M. J., vol. 89, p. 1268. 4 columns.
- NOTE ON THE OCCURRENCE OF TUNGSTEN MINERALS NEAR CALABASAS, ARIZONA.** By J. M. Hill. U. S. G. S., Bull. 430, p. 164. 3 pages.
- A TUNGSTEN DEPOSIT IN WESTERN ARIZONA.** E. & M. J., vol. 90, p. 1103. ½ column.
- THE TURQUOISE MINING DISTRICT, ARIZONA.** By J. M. Platt. E. & M. J., vol. 87, p. 213. 1½ columns.
- THE ZINC DEPOSITS OF MOHAVE COUNTY, ARIZONA.** E. & M. J., vol. 89, p. 775. 2½ columns.
- NOTE ON A WOLFRAMITE DEPOSIT IN THE WHEATSTONE MOUNTAINS, ARIZONA.** By F. L. Hess. U. S. G. S., Bull. 380, p. 164. 2 pages. 1908.

Arkansas

- MINERAL DEPOSITS OF WESTERN ARKANSAS.** By W. C. B. Allen. E. & M. J., vol. 89, p. 1328. 2 columns.
- THE ARKANSAS ANTIMONY DEPOSITS.** By F. L. Hess. U. S. G. S., Bull. 340, p. 241. 12 pages. I. 1907.
- THE CLAYS OF ARKANSAS.** By J. C. Branner. U. S. G. S., Bull. 351, 247 pages. I. 1908.

CLAYS OF GARLAND COUNTY, ARKANSAS. By E. C. Eckel. U. S. G. S., Bull. 285, p. 407. 3½ pages. 1905.

THE ARKANSAS COAL FIELD. By A. J. Collier. U. S. G. S., Bull. 316, p. 137. 25 pages. I. 1906.

THE ARKANSAS COAL FIELD. By A. J. Collier. U. S. G. S., Bull. 326, 158 pages. I. 1907.

SOME FACTS AND CORRECTIONS REGARDING THE DIAMOND REGION OF ARKANSAS. By J. C. Branner. E. & M. J., vol. 87, p. 371. 4 columns.

PRODUCTION OF DIAMONDS FROM THE ARKANSAS FIELD. E. & M. J., vol. 87, p. 155. 1½ columns.

THE ARKANSAS DIAMOND FIELDS. By O. Q. Millar. Min. & Sci. Press, vol. 99, p. 534. 1½ columns.

THE ARKANSAS DIAMOND FIELDS IN 1909. By J. F. Fuller. E. & M. J., vol. 89, p. 767. 4 columns. I.

DIAMOND MINES OF ARKANSAS. By J. L. Cowan. Min. & Sci. Press, vol. 101, p. 178. 4 columns. I.

DIAMONDS IN ARKANSAS. By G. F. Kunz and H. S. Washington. T. A. I. M. E., vol. 39, p. 169. 7 pages.

DIAMOND MINE IN PIKE COUNTY, ARKANSAS. By J. T. Fuller. E. & M. J., vol. 87, p. 152. 10½ columns. I.

DEVELOPED PHOSPHATE DEPOSITS OF NORTHERN ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 315, p. 463. 11 pages. 1906.

THE SLATES OF ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 430, p. 317. 18 pages. I. 1909.

ZINC AND LEAD IN ARKANSAS. By L. L. Wittich. M. & M., vol. 31, p. 10. 3 columns. Map.

Asia

PRINCIPAL MINES IN ASIA. Min. & Sci. Press, vol. 96, p. 161. 1½ columns. Table.

A JOURNEY TO CENTRAL ASIA. By A. Adiassewich. T. I. M. & M., vol. 17, p. 498. 28 pages.

MERCURY MINES AT KONIAH, ASIA MINOR. By F. F. Sharpless. E. & M. J., vol. 86, p. 602. 7½ columns. I.

Australia

THE MINING INDUSTRY IN QUEENSLAND, AUSTRALIA. By G. W. Williams. E. & M. J., vol. 87, p. 603. 11½ columns. I.

MINING IN AUSTRALIA. By W. J. Loring. Min. & Sci. Press, vol. 95, p. 501. 4 columns. Maps.

MINING IN AUSTRALIA. By H. L. Wilkinson. Min. & Sci. Press, vol. 95, p. 616. 5 columns.

THE LEADING MINES OF AUSTRALIA. Min. & Sci. Press, vol. 96, p. 11. 1 column. Table.

THE MINING WEALTH OF VICTORIA. By J. Stirling. T. A. I. M. E., vol. 2, p. 7. 19 pages.

FROM CAPE HOWE TO THE MURRAY ON THE VICTORIAN BORDER LINE: Exploration. By S. Hunter. T. A. I. M. E., vol. 5, p. 92. 4 pages.

MINING IN AUSTRALASIA IN 1908. By F. S. Mance. E. & M. J., vol. 86, p. 143. 5½ columns.

MINING OUTLOOK IN WESTERN AUSTRALIA. By A. Montgomery. Min. & Sci. Press, vol. 101, p. 840. 5 columns.

THE BLACK RANGE DISTRICT OF WESTERN AUSTRALIA. By J. B. Wilson. E. & M. J., vol. 88, p. 715. 9 columns. I.

MINING IN WESTERN AUSTRALIA. By A. Montgomery. Min. Mag., London, vol. 3, p. 431. 10 columns. Map.

PROGRESS OF MINING IN WESTERN AUSTRALIA. By R. Hamilton. T. A. I. M. E., vol. 13, p. 7. 18½ pages. I.

SOME GEOLOGICAL CONSIDERATIONS AFFECTING WESTERN AUSTRALIAN ORE-DEPOSITS. By A. Montgomery. T. A. I. M. E., vol. 13, p. 160. 32 pages. I.

- REMARKS ON THE BROWN COAL BEDS AND ASSOCIATED DEPOSITS OF THE WERRIBEE PLAINS, VICTORIA. By A. E. Kitson. T. Au. I. M. E., vol. 8, pt. 2, p. 255. 12 pages.
- NOTES ON VICTORIAN BROWN COAL BEDS. By J. Stirling. T. Au. I. M. E., vol. 1, p. 35. 21½ pages. I.
- THE MOUNT LYELL MINING FIELD. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 29. 169 pages.
- THE ORE DEPOSITS OF MOUNT LYELL, COPPER DEPOSITS. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 113. 34 pages. I.
- NOTES ON MOUNT READ AND ITS SULPHIDE ORE BODIES. By L. Williams. T. Au. I. M. E., vol. 8, pt. 1, p. 74. 6 pages.
- COPPER MINES IN CHILLAGOE DISTRICT, QUEENSLAND. By G. W. Williams. E. & M. J., vol. 87, p. 1125. 6 columns. I.
- THE MANY PEAKS COPPER MINE, QUEENSLAND, AUSTRALIA. By J. B. Wilson. E. & M. J., vol. 88, p. 872. 7½ columns. I.
- THE CLONCURRY COPPER DISTRICT, QUEENSLAND. By G. W. Williams. E. & M. J., vol. 88, p. 155. 13½ columns. I.
- COBAR GOLD AND COPPER FIELD, NEW SOUTH WALES. By G. W. Williams. E. & M. J., vol. 86, p. 957. 4 columns. I.
- SPECULATION ON THE ORIGIN AND FORMATION OF THE DIAMOND, WITH ESPECIAL REFERENCE TO ITS FORMATION AND POSITION AT BINGARA, NEW SOUTH WALES. By T. Mercer. T. Au. I. M. E., vol. 3, p. 56. 14½ pages.
- DOES AN AUSTRALIAN KIMBERLEY EXIST? By J. Plummer. Min. & Sci. Press, vol. 99, p. 93. 2½ columns.
- GEMS IN NEW SOUTH WALES AND QUEENSLAND. By F. S. Mance. E. & M. J., vol. 86, p. 115. ½ column.
- THE MOUNT MORGAN GOLD AND COPPER MINE. By G. W. Williams. E. & M. J., vol. 87, p. 635. 12½ columns. I.
- OCCURRENCE OF ORE IN MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 747. 1 column.
- THE MOUNT MORGAN MINE, CENTRAL QUEENSLAND. By J. B. Wilson. E. & M. J., vol. 87, p. 746. 19 columns. I.
- NATURE OF THE MOUNT MORGAN ORE DEPOSITS. E. & M. J., vol. 87, p. 635. 1½ columns.
- THE MT. MORGAN MINE. By O. M. Colvocoresses. M. & M., vol. 29, p. 3. 4½ columns. I.
- THE MOUNT MORGAN MINE. Min. & Sci. Press, vol. 95, p. 524. 3 columns. I.
- TELLURIUM IN THE ORES OF THE HAURAKI GOLDFIELDS, NEW ZEALAND. By F. B. Allen. T. Au. I. M. E., vol. 7, p. 94. 4 pages.
- THE SYNCLINAL OR "INVERTED SADDLE" REEFS OF THE BENDIGO GOLDFIELD. By W. H. Cundy. T. Au. I. M. E., vol. 8, pt. 2, p. 278. 10 pages. I.
- NOTES ON THE LEFROY GOLDFIELDS. By L. Jolly. T. Au. I. M. E., vol. 4, p. 132. 6 pages.
- MINING ON PRIVATE PROPERTY ON THE GOLDFIELDS OF WESTERN AUSTRALIA. By E. Lidgey. T. Au. I. M. E., vol. 8, pt. 1, p. 1. 10 pages. I.
- THE GOLD FIELDS OF VICTORIA. Min. & Sci. Press, vol. 20, p. 120, 1 column; p. 130, 1½ columns; p. 234, 2 columns; p. 266, 1 column.
- NOTES ON THE GEOLOGY, QUARTZ REEFS AND MINERALS OF THE WAIHI GOLDFIELD, NEW SOUTH WALES, AUSTRALIA. By P. C. Morgan. T. Au. I. M. E., vol. 8, pt. 2, p. 164. 23½ pages. I.
- GOLD IN SALT LAKES IN WESTERN AUSTRALIA. T. Au. I. M. E., vol. 8, pt. 1, p. 32. 1 page.
- NOTES ON THE AURIFEROUS DEVONIAN FORMATIONS OF GIPPSLAND, VICTORIA. By H. Herman. T. Au. I.

- M. E., vol. 5, p. 157. 12 pages. Maps
- A FEW NOTES AND OBSERVATIONS ON THE REDUCTION AND ORE-DRESSING OF AURIFEROUS QUARTZ VEINSTONE IN VICTORIA. By H. Rosales. T. Au. I M E., vol. 5, p. 81. 12 pages. Tables.
- AURIFEROUS VEINS AT CHARTERS TOWERS, AUSTRALIA. By W. J. Paull. T. Au. I M E., vol. 3, p. 243. 6 pages.
- SOME GOLD-BEARING ROCKS AT BINGARA, NEW SOUTH WALES. By C. H. Mole. T. Au. I M E., vol. 2, p. 114. 2½ pages.
- PHYSIOGRAPHY AND GEOLOGY OF THE WADNAMINGA GOLDFIELDS, SOUTH AUSTRALIA. By F. D. Johnson. T. Au. I M E., vol. 2, p. 58. 10 pages. I
- GOLD DEPOSITS OF COTHY, SOUTH WALES. By B. W. Holman. Min. Mag., vol. 4, p. 374. 8½ columns. I
- LEADING PRODUCERS OF KALGOORLIE, WEST AUSTRALIA. By G. W. Williams. E. & M. J., vol. 85, p. 403. 3½ columns.
- IMPRESSIONS OF THE COUNTRY BETWEEN COOLGARDIE AND McDONNELL RANGES. By H. V. Smith. T. Au. I M E., vol. 8, pt. 1, p. 68. 4½ pages.
- THE DISCOVERY AND OCCURRENCE OF TELLURIDE OF GOLD UPON THE KALGOORLIE GOLDFIELDS, EAST COOLGARDIE DISTRICT, WESTERN AUSTRALIA. By A. G. Holroyd. T. Au. I M E., vol. 4, p. 186. 8 pages.
- ALLUVIAL DEPOSITS IN WESTERN AUSTRALIA. T. Au. I M E., vol. 13, p. 182. 2 pages.
- DEEP LEAD MINING IN AUSTRALIA. By D. H. Browne. Min. & Sci. Press, vol. 97, p. 565. 9½ columns. I
- DEEP LEADS OF VICTORIA: The Cainozoic Buried Auriferous River Deposits. By H. L. Wilkinson. T. I. M. & M., vol. 17, p. 210. 58 pages. I.
- GOLD NUGGETS OF VICTORIA. T. Au. I M E., vol. 2, p. 23. 1 page.
- TWO IMPORTANT IRON ORE DEPOSITS OF AUSTRALIA. By J. B. Wilson. E. & M. J., vol. 89, p. 724. 16½ columns. I
- THE SILVER-LEAD-ZINC MINES AT BROKEN HILL, NEW SOUTH WALES. By G. W. Williams. E. & M. J., vol. 86, p. 793. 16½ columns. I.
- REMINISCENCES OF BROKEN HILL. By J. Warren. T. Au. I M E., vol. 9, p. 1. 23 pages. I.
- SOME NOTES ON THE WHITE CLIFFS OPAL FIELDS, WILCANNIA, NEW SOUTH WALES. By F. G. de V. Gipps. T. Au. I M E., vol. 2, p. 70. 6 pages; p. 76, 5 pages. I.
- THE AUSTRALIAN OIL SHALE INDUSTRY. E. & M. J., vol. 87, p. 1051. 1½ columns.
- OIL SHALE DEPOSITS, BLUE MOUNTAINS, NEW SOUTH WALES. By H. L. Jene. E. & M. J., vol. 90, p. 407. 4½ columns. D.
- THE CLARENDON PHOSPHATE DEPOSIT, NEAR DUNEDIN, NEW ZEALAND. By A. Andrew. T. Au. I M E., vol. 11, p. 177. 20 pages. I.
- RADIUM IN AUSTRALIA. By J. Plummer. Min. & Sci. Press, vol. 100, p. 292. 1½ columns.
- BROKEN HILL SILVER MINE. By E. C. Andrews. Min. & Sci. Press, vol. 98, p. 158. 2 columns.
- ORE DEPOSITS OF THE PEAKS SILVER FIELD, NEW SOUTH WALES. By C. O. G. Larcombe. T. Au. I M E., vol. 11, p. 128. 8 pages. I
- TIN MINING AND MILLING IN NORTH QUEENSLAND. By G. W. Williams. E. & M. J., vol. 87, p. 1092. 6½ columns.
- THE NORTH DUNDAS TIN DISTRICT. By J. M. Bell. Min. Mag., vol. 4, p. 59. 4 columns. Map.

Austria-Hungary

PRODUCT OF THE MINES, SMELTING FURNACES AND SALT WORKS IN THE AUSTRIAN EMPIRE. *Min. Mag.*, vol. 3, p. 141. 20 pages.

NAGYBANYA, HUNGARY. By E. Skewes. *Min. & Sci. Press*, vol. 96, p. 66 7½ columns. I.

THE BOICZA GOLD MINES IN HUNGARY. By N. B. Knox. *Min. & Sci. Press*, vol. 100, p. 31. 8 columns. I.

THE VERESEPAK-ABRUDBANYA (Gold) DISTRICT, HUNGARY. By G. Slujka. *E. & M. J.*, vol. 85, p. 154. 1½ columns.

THE GOLD ALLUVIALS OF THE RIVER DRAU IN HUNGARY. By A. von Gernet. *T. I. M. & M.*, vol. 17, p. 439 4 pages.

Belgium

MINING OPERATIONS IN THE PROVINCE OF HAINAUT, BELGIUM. *Min. Mag.*, vol. 3, p. 255. 4 pages.

PHOSPHATE MINING IN BELGIUM. *T. I. M. E.*, vol. 37, p. 683. 2½ pages.

THE ZINC ORES OF LA MALLIENE (Belgium). By H. De Pauw. *T. I. M. E.*, vol. 37, p. 651. 1½ pages.

Bolivia

TIN MINING IN BOLIVIA. By W. R. Rumbold. *Min. Mag.*, London, vol. 2, p. 451. 6 columns. I.

TIN MINING IN BOLIVIA. By W. Gray and A. L. Halden. *Min. Mag.*, London, vol. 3, p. 203. 6 columns. I.

BEDDED COPPER DEPOSITS OF CARANGAS, BOLIVIA. By R. Hawhurst, Jr. *E. & M. J.*, vol. 90, p. 909. 12½ columns. I.

PROSPECTING FOR "BLACK DIAMONDS." By A. S. Atkinson. *M. & M.*, vol. 30, p. 644. 2½ columns.

THROUGH THE BOLIVIAN HIGHLANDS. By E. P. Mathewson. *Min. & Sci. Press*, vol. 97, p. 227, 4 columns; p. 263, 8½ columns, I.

GOLD DEPOSITS IN BOLIVIA. *M. & M.*, vol. 30, p. 379. 1 column. Map.

SUCHEZ DE BOLIVIA HYDRAULIC MINE. By W. E. G. Firebrace. *Min. & Sci. Press*, vol. 98, p. 287. 3 columns. I.

THE CHOROLQUE TIN DISTRICT, BOLIVIA. *Min. Mag.*, vol. 4, p. 213. 4 columns. I.

Brazil

IRON ORE DEPOSITS OF BRAZIL. By O. A. Derby. *E. & M. J.*, vol. 88, p. 1258 3½ columns.

MINERAL RESOURCES OF THE BAHIA HIGHLANDS, BRAZIL. *E. & M. J.*, vol. 87, p. 1029. 12½ columns. I.

BRAZILIAN DIAMONDS. *Min. & Sci. Press*, vol. 95, p. 24. 1 column.

OCCURRENCE OF THE DIAMONDS OF BAHIA, BRAZIL. *E. & M. J.*, vol. 87, p. 984 5 columns. I.

THE DIAMOND BEARING HIGHLANDS OF BAHIA, BRAZIL. By J. C. Branner. *E. & M. J.*, vol. 87, p. 981, 17½ columns, I; p. 1029, 12½ columns, I.

BRAZILIAN DIAMOND MINING. *E. & M. J.*, vol. 85, p. 442. 1 column.

THE DIAMANTINA DISTRICT OF MINAS GERAES. By G. W. Lindsay. *E. & M. J.*, vol. 87, p. 856. 2 columns.

MINING FOR GEMS IN BRAZIL. By A. S. Atkinson. *E. & M. J.*, vol. 87, p. 1234. 5 columns.

AURIFEROUS ALLUVIALS OF THE UPPER AMAZON VALLEY. By Sir W. M. Conway. *E. & M. J.*, vol. 87, p. 496. 2 columns.

BRAZIL'S IRON-ORE DEPOSITS. By G. E. Anderson. *M. & M.*, vol. 31, p. 7. 5 columns.

MANGANESE DEPOSITS OF MORRO DA MINA, BRAZIL. By J. Lustosa and J. C. Branner. *E. & M. J.*, vol. 86, p. 1196. 5½ columns. I.

THE THORIUM NITRATE INDUSTRY. *M. & M.*, vol. 30, p. 768. 1½ columns.

British Columbia

BRITISH COLUMBIA MINES AND MINERALS. By E. Jacobs. E. & M. J., vol 90, p. 257. 4½ columns

THE COAST DISTRICT OF BRITISH COLUMBIA. E. & M. J., vol. 87, p. 888. 4½ columns.

MINING IN BRITISH COLUMBIA IN 1908. By E. Jacobs M. & M., vol 29, p. 327. 3 columns.

BRITISH COLUMBIA MINING, 1909 Min & Sci. Press, vol 101, p. 149. 3½ columns.

NOTES ON MOTHER LODE IN BRITISH COLUMBIA. By R. H. Allen E. & M. J., vol. 88, p. 1101 7 columns I.

MINING IN BRITISH COLUMBIA IN 1909. By E. Jacobs M. & M., vol. 30, p. 407. 2 columns.

THE MINERAL RESOURCES OF THE QUEEN CHARLOTTE ISLAND, BRITISH COLUMBIA. By J. McLellan. J. C. M. I., vol. 13, p. 288. 8 pages. I. Map.

OBSERVATIONS ON THE GEOLOGY AND ORE DEPOSITS OF CAMP HEDDLEY, BRITISH COLUMBIA. By C. Cam-sell. J. C. M. I., vol. 11, p. 423. 10 pages. Maps.

A PARTIAL BIBLIOGRAPHY OF PUBLICATIONS REFERRING TO THE GEOLOGY AND MINERAL INDUSTRY OF ALBERTA, BRITISH COLUMBIA AND THE YUKON. By J. C. Gwillim. J. C. M. I., vol 11, p. 433 11½ pages.

THE "WHITE BEAR MINE," ROSSLAND, BRITISH COLUMBIA. By H. H. Yuill. J. C. M. I., vol. 11, p. 525. 16 pages. I.

THE GEOLOGY AND ORE DEPOSITS OF FRANKLIN CAMP, BRITISH COLUMBIA. By R. W. Brock. J. C. M. I., vol. 10, p. 170. 10 pages. I.

NEW COALFIELD IN BRITISH COLUMBIA. E. & M. J., vol. 85, p. 544. ¾ column.

THE HOSMER MINES, LTD., BRITISH COLUMBIA: Coal By H. H. Yuill. J. C. M. I., vol. 13, p. 230 27 pages I. Maps.

THE NICOLA VALLEY COAL-FIELD, BRITISH COLUMBIA. By M. Roberts. T A I. M. E., vol 40, p. 798. 6 pages. I.

THE NICOLA VALLEY COAL-FIELD, BRITISH COLUMBIA By M. Roberts. T A I. M. E., vol 40, p. 798 6 pages. I.

THE CLASSIFICATION OF NICOLA VALLEY COALS, BRITISH COLUMBIA. By S. J. Castleman. J. C. M. I., vol. 13, p. 600. 3 pages.

THE NORTHERN CASCADES: Mining Along the International Boundary. By H. F. Evans. Min & Sci. Press, vol. 100, p. 448. 4 columns I.

NOTES ON THE TYRE COPPER MINE. By W. H. Weed. E. & M. J., vol. 85, p. 199. 6½ columns. I.

FURTHER OBSERVATIONS RELATIVE TO THE OCCURRENCE OF DEPOSITS OF COPPER ORE ON THE NORTH PACIFIC AND ADJACENT ISLANDS FROM THE SOUTHERN BOUNDARY OF BRITISH COLUMBIA TO THE ALASKAN PENINSULA. By W. M. Brewer. J. C. M. I., vol 10, p. 195 14 pages.

MINES OF THE GRANBY CONSOLIDATED, PHOENIX, BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol 88, p. 1260. 7 columns I.

THE CENTRE STAR GROUP OF MINES, ROSSLAND, BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 89, p. 17. 8½ columns. I.

LE ROI MINE AT ROSSLAND, BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 89, p. 220. 4 columns. I.

BEAR RIVER DISTRICT, BRITISH COLUMBIA. By W. W. Rush. Min. & Sci. Press, vol. 99, p. 152. 2 columns. Map.

THE PORTLAND CANAL MINING DISTRICT, BRITISH COLUMBIA. E. & M. J., vol. 90, p. 451. 3 columns. I.

- MAGNETITE DEPOSITS OF TEXADA AND VANCOUVER ISLANDS. By E. Lindeman. J. C. M. I., vol. 13, p. 107. 15½ pages. Maps.
- THE EMMA MINE, BOUNDARY DISTRICT BRITISH COLUMBIA. By F. Keffer. J. C. M. I., vol. 10, p. 188. 6½ pages. I. Map.
- OCCURRENCE OF MAGNETITE IN THE EMMA MINE, BRITISH COLUMBIA. J. C. M. I., vol. 10, p. 188. 6 pages. I.
- ST. EUGENE MINE AND MILL, EAST KOOTENAY, BRITISH COLUMBIA. By E. Jacobs. E. & M. J., vol. 89, p. 420. 7 columns. I.
- OCCURRENCE OF LEAD-SILVER ORE AT KOOTENAY, BRITISH COLUMBIA, EUGENE MINE. E. & M. J., vol. 89, p. 420. 1½ columns. I.
- OCCURRENCE OF SILVER-LEAD ORES AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA. E. & M. J., vol. 89, p. 420. 1½ columns. I.
- PLATINUM DEPOSITS IN BRITISH COLUMBIA. J. C. M. I., vol. 13, p. 317. 2½ pages.
- PLATINUM MINING IN THE TULAMEEN DISTRICT, BRITISH COLUMBIA. By C. Camsell. J. C. M. I., vol. 13, p. 309. 15 pages. I. Map.
- See also MISCELLANEOUS PRODUCTION.
- CALIFORNIA
- THE NEW SAN FRANCISCO. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 554. 2 columns. I.
- BORAX IN CALIFORNIA. Min. & Sci. Press, vol. 101, p. 400. 1½ columns.
- BORATE DEPOSITS OF CALIFORNIA. By W. B. Wainwright. T. I. M. E., vol. 37, p. 156. 6 pages.
- COAL MINING IN CALIFORNIA. Min. & Sci. Press, vol. 95, p. 186. ¼ column.
- COAL IN THE MOUNT DIABLO RANGE, MONTEREY COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 285, p. 223. 2 pages. I. 1905.
- COAL OF STONE CANYON, MONTEREY COUNTY, CALIFORNIA. By M. R. Campbell. U. S. G. S., Bull. 316, p. 435. 4 pages. 1906.
- THE OCCURRENCE OF COPPER IN SHASTA COUNTY, CALIFORNIA. By L. C. Groton. U. S. G. S., Bull. 430, p. 71. 40½ pages. I. 1909.
- THE BALAKLALA CONSOLIDATED COPPER COMPANY, CALIFORNIA. E. & M. J., vol. 87, p. 501. 9 columns. I.
- PRIMARY CHALCOITE IN CALIFORNIA. By O. H. Hershey. Min. & Sci. Press, vol. 96, p. 429. 3 columns.
- THE GENESIS OF THE COPPER ORE IN SHASTA COUNTY, WEST OF THE SACRAMENTO RIVER. By W. Forester. Min. & Sci. Press, vol. 97, p. 261. 3 columns.
- COPPER MINES AND SMELTERIES OF SHASTA COUNTY, CALIFORNIA. By G. A. Packard. E. & M. J., vol. 88, p. 393. 20½ columns. I.
- DIAMONDS IN CALIFORNIA. By H. G. Hauks. Min. & Sci. Press, vol. 20, p. 162; 2½ columns; p. 194, 1 column; vol. 22, p. 140, ½ column.
- DIATOMACEOUS DEPOSITS OF NORTHERN SANTA BARBARA COUNTY, CALIFORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 315, p. 438. 10 pages. 1906.
- CALIFORNIA GOLD MINING. Min. & Sci. Press, vol. 100, p. 17, 3 columns. I.
- MINERAL PROSPECTS AROUND DEATH VALLEY. By R. E. Rinehart. Min. & Sci. Press, vol. 97, p. 297. 4½ columns. I.
- MINERAL DISTRICT OF CENTRAL CALIFORNIA. By J. B. Trask. Min. Mag., vol. 3, p. 121, 15 pages; p. 239, 12 pages.
- MINES AND MINING IN CALIFORNIA: Placer Mining. Min. Mag., vol. 5, p. 193. 23 pages.
- QUARTZ MINING OPERATIONS IN CALIFORNIA. Min. Mag., vol. 1, p. 144. 5½ pages.

- EXPERIENCE OF THE GOLD MINES OF CALIFORNIA.** Min. Mag, vol. 8, p. 28, 12 pages; p. 129, 8½ pages; p. 222, 6 pages; p. 477, 10 pages.
- THE NEW GOLD FIELD IN SAN DIEGO COUNTY, CALIFORNIA.** Min. & Sci. Press, vol. 20, p. 200. 1 column
- MINING ON THE MOTHER LODE IN AMADOR COUNTY, CALIFORNIA.** By W. H. Storms. Min. & Sci. Press, vol. 100, p. 897. 6 columns
- THE EXPOSED TREASURE LODE, MOJAVE, CALIFORNIA.** By C. De Kalb. T. A. I. M. E., vol. 38, p. 310. 10 pages. I.
- THE STANDARD MINE, BODIE, CALIFORNIA.** By R. G. Brown. T. A. I. M. E., vol. 38, p. 343. 15 pages. I.
- OBSERVATIONS ON THE EXTENT OF THE GOLD REGION OF CALIFORNIA AND OREGON.** By W. P. Blake. Min. Mag., vol. 5, p. 32. 14 pages.
- HART—A NEW CALIFORNIA GOLD CAMP.** E. & M. J., vol. 85, p. 308. ½ column.
- GOLD PARK DISTRICT, CALIFORNIA.** E. & M. J., vol. 90, p. 600. 2 columns. I.
- BLACK DIAMOND, CALIFORNIA** By O. H. Hershey. Min. & Sci. Press, vol. 98, p. 147. 1½ columns.
- GOLD MINING IN RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. Min. & Sci. Press, vol. 101, p. 508, 4 columns; p. 533, 8 columns, I.
- GOLD MINING IN THE RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 430, p. 23. 24 pages. 1909.
- HOAG DISTRICT, CALIFORNIA.** By N. C. Stines. Min. & Sci. Press, vol. 100, p. 384. 5½ columns. I.
- KEYSTONE CONSOLIDATED MINE AND ITS EARLY HISTORY.** By W. H. Storms. Min. & Sci. Press, vol. 100, p. 755. 4 columns. I.
- MINING AT GRASS VALLEY AND NEVADA CITY.** By G. E. Wolcott. E. & M. J., vol. 87, p. 396. 6½ columns. I.
- MINING AT ALLEGHANY, CALIFORNIA.** By F. L. Lowell. Min. & Sci. Press, vol. 100, p. 132. 3 columns. I.
- SOME ORE DEPOSITS IN THE INYO RANGE, CALIFORNIA.** By J. A. Reid. Min. & Sci. Press, vol. 95, p. 80. 4½ columns. I.
- GOLD MINES NEAR THE CALAVERAS BIG TREES.** Min. & Sci. Press, vol. 22, p. 361. 1 column
- THE WEAVERVILLE-TRINITY CENTER GOLD GRAVELS, TRINITY COUNTY, CALIFORNIA.** By D. F. MacDonald. U. S. G. S., Bull. 430, p. 48. 11 pages. I. 1909
- SANTA CLARA RIVER PLACERS.** By C. E. Jamison. Min. & Sci. Press, vol. 100, p. 360. 2½ columns.
- LA GRANGE HYDRAULIC MINE, CALIFORNIA** By D. F. Campbell. Min. & Sci. Press, vol. 97, p. 491. 6 columns. I.
- CALIFORNIA GOLD NUGGETS.** Min. & Sci. Press, vol. 20, p. 178. ½ column.
- THE GYPSUM DEPOSITS OF THE PALEN MOUNTAINS, RIVERSIDE COUNTY, CALIFORNIA.** By E. C. Harder. U. S. G. S., Bull. 430, p. 407. 10 pages. I. 1909.
- GYPSUM DEPOSITS NEAR CANE SPRINGS, KERN COUNTY, CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 430, p. 417. 2 pages. 1909.
- A RECONNAISSANCE OF THE GYPSUM DEPOSITS OF CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 413. 37 pages. I. 1910.
- AN IRON DEPOSIT IN THE CALIFORNIA DESERT REGION.** By C. C. Jones. E. & M. J., vol. 87, p. 785. 10 columns. I.
- IRON ORES OF CALIFORNIA.** By H. C. Harder. Min. & Sci. Press, vol. 101, p. 79. 3½ columns. Maps.
- OCCURRENCE OF AN IRON ORE DEPOSIT IN THE CALIFORNIA DESERT REGION.** E. & M. J., vol. 87, p. 785. 10 columns. I.

- SOME IRON ORES OF WESTERN AND CENTRAL CALIFORNIA.** By E. C. Hader. U. S. G. S., Bull. 430, p. 219. 8½ pages. 1909.
- THE IRON AGE IRON-ORE DEPOSIT, NEAR DALE, SAN BERNARDINO COUNTY, CALIFORNIA.** By E. C. Hader and J. L. Rich. U. S. G. S., Bull. 430, p. 228. 12 pages. I. 1909.
- IRON ORES OF THE SOUTHWEST.** By C. C. Jones. M. & M., vol. 31, p. 574. 4½ columns.
- CHROME ORE IN CALIFORNIA.** By C. G. Yale. E. & M. J., vol. 85, p. 101. ½ column.
- SOME CHROMITE DEPOSITS IN WESTERN AND CENTRAL CALIFORNIA.** By E. C. Harder. U. S. G. S., Bull. 430, p. 167. 16½ pages. I. 1909.
- CALIFORNIA MINERALS.** By A. S. Eakle. Min. & Sci. Press, vol. 96, p. 98. 2½ columns.
- MAGNESITE DEPOSITS OF CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 355. 67 pages. I. 1908.
- MAGNESITE IN CALIFORNIA.** E. & M. J., vol. 87, p. 292. ½ column.
- SOME MAGNESITE DEPOSITS OF CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 285, p. 385. 8 pages. 1905.
- NITRATE DEPOSITS OF SOUTHERN CALIFORNIA.** By F. W. Graeff. E. & M. J., vol. 90, p. 173. 2½ columns.
- OIL RESOURCES OF CALIFORNIA.** By M. L. Requa. Min. Mag., vol. 4, p. 47. 10½ columns. Map.
- OIL INDUSTRY IN CALIFORNIA IN 1909.** Min. & Sci. Press, vol. 100, p. 97. 5 columns. I.
- PETROLEUM DEVELOPMENT IN SAN JOAQUIN VALLEY.** E. & M. J., vol. 89, p. 964. 7 columns.
- THE CALIFORNIA OIL INDUSTRY.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 857. 5½ columns.
- GEOLOGY OF THE COALINGA DISTRICT, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 398. 354 pages. I. 1910.
- PRELIMINARY REPORT ON THE COALINGA OIL DISTRICT IN FRESNO AND KINGS COUNTIES, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 357. 142 pages. I. 1908.
- OIL MEASURES IN THE COALINGA DISTRICT, CALIFORNIA.** By W. Forstner. Min. & Sci. Press, vol. 98, p. 386. 3½ columns.
- GEOLOGY AND OIL RESOURCES OF THE SANTA MARIA OIL DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA.** By R. Arnold and R. Anderson. U. S. G. S., Bull. 322. 161 pages. I. 1907.
- GEOLOGY AND OIL RESOURCES OF THE CUMBERLAND DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 321. 91 pages. I. 1907.
- PRELIMINARY REPORT ON MCKITTRICK — SUNSET OIL REGION, CALIFORNIA.** By R. Arnold and H. R. Johnson. U. S. G. S., Bull. 406. 225 pages. I. 1910.
- THE SALT LAKE OIL FIELD NEAR LOS ANGELES, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 285, p. 357. 5 pages. I. 1905.
- THE MINER RANCH OIL FIELD, CONTRA COSTA COUNTY, CALIFORNIA.** By R. Arnold. U. S. G. S., Bull. 340, p. 339. 4 pages. 1907.
- LAKE VIEW GUSHER: A Large Oil Well in Midway Field, California.** Min. & Sci. Press, vol. 100, p. 925. 2 columns. I.
- THE LOS ANGELES OIL INDUSTRY.** By P. E. Barbour. E. & M. J., vol. 88, p. 365. 5 columns.
- QUICKSILVER IN CALIFORNIA.** Min. & Sci. Press, vol. 100, p. 15. 3½ columns. Map.
- MERCURY MINES OF NEW ALMADEN, CALIFORNIA.** Min. Mag., vol. 10, p. 142. 2½ pages.
- SODIUM SULPHATE IN SODA LAKE, CARRISO PLAIN, SAN LUIS OBISPO COUNTY, CALIFORNIA.** By R.

- Arnold and H. R. Johnson. U. S. G. S, Bull. 380, p. 369. 3 pages. 1908.
- SODIUM SULPHATE IN SAN LUIS OBISPO COUNTY, CALIFORNIA. By R. Arnold and H. R. Johnson. Min. & Sci. Press, vol. 99, p. 855. 1½ columns.
- TRIPOLI DEPOSITS OF CALIFORNIA. Min. & Sci. Press, vol. 95, p. 54. ½ column.
- TOURMALINE IN CALIFORNIA. By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 864. 4 columns.
- OCCURRENCE OF TUNGSTEN IN RAND DISTRICT, CALIFORNIA. By S. A. Dolbear. E. & M. J., vol. 90, p. 904. 4½ columns.
- TUNGSTEN MINING IN CALIFORNIA. E. & M. J., vol. 86, p. 573. 2 columns. I.
- See also MISCELLANEOUS PRODUCTION.
- Canada**
- NOTES ON EARLY MINING ENDEAVOUR IN ONTARIO. By E. L. Fraalick. J. C. M. I., vol. 11, p. 151. 4½ pages.
- ORE DEPOSITS IN WESTERN ONTARIO. E. & M. J., vol. 90, p. 325. 3 columns.
- A VISIT TO THE MINERAL DISTRICT OF CANADA. By W. Frecheville and H. F. Martiott. T. I. M. & M., vol. 18, p. 158. 21 pages. I. Map.
- CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA, LTD. E. & M. J., vol. 85, p. 557. 7½ columns. I.
- NEW DISCOVERIES IN NORTHERN QUEBEC. By J. Obalski. J. C. M. I., vol. 10, p. 103. 3 pages.
- MINERALS AND ORES OF NORTHERN CANADA. By J. B. Tyrrell. J. C. M. I., vol. 11, p. 347. 18 pages. I.
- NOTES ON RECENT DEVELOPMENTS IN ASBESTOS MINING IN QUEBEC. By W. J. Woolsey. J. C. M. I., vol. 13, p. 408. 6 pages. I.
- ON THE DISTRIBUTION OF ASBESTOS DEPOSITS IN THE EASTERN TOWNSHIPS OF QUEBEC. By J. A. Dresser. J. C. M. I., vol. 13, p. 414. 26 pages. I.
- ASBESTOS IN QUEBEC. By F. Cirkel. E. & M. J., vol. 86, p. 461. 1 column.
- THE QUARRIES OF THE CANADIAN ASBESTOS DISTRICT. By F. Cirkel. E. & M. J., vol. 89, p. 918. 6½ columns. I.
- THE TAR-SANDS OF THE ATHABASCA RIVER, CANADA. By Robt. Bell. T. A. I. M. E., vol. 38, p. 836. 12 pages. I.
- THE COALFIELDS OF CANADA. By P. Thompson. E. & M. J., vol. 88, p. 1271. 2 columns.
- COAL AREAS IN THE CANADIAN NORTH-WEST. E. & M. J., vol. 90, p. 548. 4 columns.
- MINING AT LITHBRIDGE, ALBERTA. By A. T. Shurick. M. & M., vol. 31, p. 635. 2 columns. I.
- THE COALFIELDS OF ALBERTA AND SASKATCHEWAN. By B. Thompson. E. & M. J., vol. 88, p. 17. 3½ columns.
- THE COALS AND COAL FIELDS OF ALBERTA, SASKATCHEWAN AND MANITOBA. By D. B. Dowling. J. C. M. I., vol. 10, p. 227. 13 pages. I. Map.
- THE GALT COAL FIELD, ALBERTA, CANADA. By W. D. L. Hardie. J. C. M. I., vol. 13, p. 190. 5½ pages. D.
- THE CREIGHTON MINE OF THE CANADIAN COPPER COMPANY, SUDBURY DISTRICT, ONTARIO. By L. Stewart. J. C. M. I., vol. 11, p. 567. 19 pages. I.
- GOLD AREAS IN THE CANADIAN NORTH-WEST. E. & M. J., vol. 90, p. 548. 4 columns.
- GOLD IN THE EASTERN TOWNSHIPS OF THE PROVINCE OF QUEBEC. By J. Obalski. J. C. M. I., vol. 11, p. 251. 6 pages. I. Map.
- THE LARDER LAKE DISTRICT, ONTARIO. E. & M. J., vol. 85, p. 258. 2 columns.

- THE NICKEL PLATE MINE AND MILL. Min. & Sci. Press, vol. 101, p. 271. 4 columns. I.
- RECENT MINING DEVELOPMENTS ON MT. SKEENA RIVER, CANADA. By W. W. Leach. J. C. M. I., vol. 13, p. 357. 6 pages.
- THE OPASATKA LAKE DISTRICT, PROVINCE OF QUEBEC. By F. Cirkel. E. & M. J., vol. 87, p. 455. 3 columns. I.
- THE NEW GOLDFIELDS OF PORCUPINE, ONTARIO. By R. E. Hore. E. & M. J., vol. 90, p. 1296. 3½ columns. I.
- THE PORCUPINE DISTRICT, ONTARIO. By R. W. Brock. E. & M. J., vol. 90, p. 221. 3 columns.
- THE PORCUPINE GOLDFIELD. By A. L. Simar. Min. Mag., London, vol. 3, p. 348. 6 columns. I.
- PORCUPINE, THE NEW GOLD REGION OF THE FAR NORTH. Min. & Sci. Press, vol. 101, p. 705. 3½ columns.
- PORCUPINE DISTRICT OF ONTARIO. By W. G. Miller. Min. & Sci. Press, vol. 101, p. 232. 2 columns. Map.
- PORCUPINE LAKE REGION, ONTARIO. E. & M. J., vol. 89, p. 209. 3½ columns. Map.
- THE PORCUPINE GOLDFIELD. By W. J. Loring. Min. Mag., vol. 4, p. 284. 8 columns. I.
- THE PORCUPINE GOLD FIELD. By R. A. Meyer. M. & M., vol. 31, p. 701. 4½ columns. Map.
- A BRIEF DESCRIPTION OF THE GOWGANDA SILVER DISTRICT IN ONTARIO, CANADA. By P. R. Iseman. Sch. Mines Quart., vol. 31, p. 172. 4½ pages. I.
- FIRST YEAR OF THE GOWGANDA DISTRICT, ONTARIO. By G. M. Colvocoresses. E. & M. J., vol. 89, p. 1218. 9½ columns. I.
- THE GOWGANDA REGION IN ONTARIO. E. & M. J., vol. 88, p. 60. 5 columns.
- IMPRESSIONS OF A NEW CAMP. GOWGANDA. By H. E. West. E. & M. J., vol. 87, p. 900. 7 columns.
- NOTES ON THE RAINY RIVER DISTRICT, ONTARIO. By W. L. Fleming. E. & M. J., vol. 88, p. 1064. 6½ columns. I.
- THE EASTERN CANADIAN MINERAL BELT. By T. F. Van Wagenen. Min. & Sci. Press, vol. 101, p. 372. 5½ columns. Maps.
- MONTREAL RIVER DISTRICT, CANADA. By W. H. Collins. Min. & Sci. Press, vol. 98, p. 895. 2 columns.
- CANADIAN GRAPHITE. By H. P. H. Brumell. J. C. M. I., vol. 10, p. 83. 20 pages.
- MODES OF OCCURRENCE OF CANADIAN GRAPHITE. By H. P. H. Brumell. J. C. M. I., vol. 11, p. 236. 14½ pages.
- CANADIAN GRAPHITE. By H. M. Lamb. E. & M. J., vol. 85, p. 360. 5½ columns.
- THE IRON ORES OF ONTARIO. By A. B. Willmott. J. C. M. I., vol. 11, p. 106. 18 pages.
- THE IRON ORES OF CANADA. By C. K. Leith. J. C. M. I., vol. 11, p. 91. 16 pages.
- OCCURRENCES OF IRON ORES AT BRUCE MINES, ONTARIO. J. C. M. I., vol. 10, p. 158. 2 pages. D.
- IRON MINING POSSIBILITIES IN THE PROVINCE OF QUEBEC. By F. Cirkel. J. C. M. I., vol. 10, p. 108. 10 pages. D.
- IRON RANGES OF NORTHERN AND NORTHWESTERN ONTARIO. E. & M. J., vol. 89, p. 360. 7 columns.
- THE MOOSE MOUNTAIN IRON RANGE, WITH SPECIAL REFERENCE TO THE PROPERTIES OF MOOSE MOUNTAIN LTD. By N. L. Leach. J. C. M. I., vol. 11, p. 147. 4 pages.
- THE BRUCE MINES, ONTARIO, 1846-1906. By H. J. Carnegie Williams. J. C. M. I., vol. 10, p. 147. 22 pages. I.

- THE HELEN MINE, MICHIPICOTEN, ONTARIO: Iron Ore. By R. W. Seelye. J. C. M. I., vol 13, p. 121. 14½ pages. I.
- CHROME ORE IN CANADA. By P. Thompson. E. & M. J., vol 88, p. 726. 2½ columns
- CHROME IRON MINING AND MILLING IN CANADA. By H. F. Strangways. E. & M. J., vol 85, p. 595. 7 columns. I
- THE MOOSE MOUNTAIN IRON RANGE, CANADA. By J. J. Bell. E. & M. J., vol. 85, p. 805. 2½ columns. I.
- THE IRON RANGES EAST OF LAKE NIPIGON, ONTARIO. By A. P. Coleman and E. S. Moore. E. & M. J., vol. 83, p. 445. 2 columns.
- CANADIAN IRON ORE INDUSTRY. M. & M., vol. 31, p. 455. 6½ columns. I.
- MINING IRON UNDER THE SEA. By H. W. Buker. M. & M., vol. 31, p. 569. 7 columns. I.
- THE MICA INDUSTRY IN CANADA. By F. Cirkel. E. & M. J., vol 85, p. 801. 3½ columns. I.
- THE TILBURY AND ROMNEY OIL-FIELDS IN ONTARIO. E. & M. J., vol. 85, p. 363. 1 column.
- THE COMMERCIAL VALUE OF THE OIL-SHALES OF EASTERN CANADA, BASED ON THEIR CONTENTS BY ANALYSIS IN CRUDE OIL AND AMMONIUM SULPHATE. By R. W. Ellis. J. M. Soc. N. S., vol 15, p. 29. 28 pages.
- THE NEW TILBURY AND ROMNEY OIL FIELDS OF KENT COUNTY, ONTARIO. By E. Coste. J. C. M. I., vol. 10, p. 77. 8 pages.
- PEAT IN CANADA. E. & M. J., vol. 88, p. 361. 2 columns.
- THE PEAT FUEL INDUSTRY OF CANADA. E. & M. J., vol. 87, p. 905. 1 column.
- THE SILVER VEINS OF THE MONTREAL RIVER DISTRICT, CANADA. By A. E. Barlow. Min. & Sci. Press, vol. 97, p. 462. 6½ columns.
- MINING AT COBALT. By F. C. Loring. E. & M. J., vol. 85, p. 905. 4 columns.
- MINING AT COBALT. By F. C. Loring. J. C. M. I., vol 11, p. 335. 5 pages
- OCCURRENCE OF THE COBALT-SILVER ORES OF NORTHERN ONTARIO. J. C. M. I., vol. 11, p. 275. 12 pages.
- THE COBALT MINING DISTRICT. By R. Bell. J. C. M. I., vol 10, p. 62. 10 pages.
- THE ORE DEPOSITS OF THE COBALT DISTRICT, ONTARIO, CANADA. By C. R. Van Hise. J. C. M. I., vol. 10, p. 45. 16 pages.
- THE PROBABLE NUMBER OF PRODUCTIVE VEINS IN THE COBALT DISTRICT. By G. R. Mickle. J. C. M. I., vol. 13, p. 325. 12 pages.
- THE PRESENT POSITION OF COBALT, CANADA. By H. P. Davis. E. & M. J., vol 86, p. 855. 5 columns. I.
- THE COBALT SILVER DISTRICT, ONTARIO, CANADA. By W. B. Phillips. E. & M. J., vol. 86, p. 518. 2½ columns.
- COBALT, ONTARIO, CANADA. By H. B. Smith. Min. & Sci. Press, vol. 96, p. 876. 5½ columns. I.
- COBALT, ONTARIO, CANADA. By F. C. Loring. Min. & Sci. Press, vol. 95, p. 814. 2½ columns. I.
- OPERATIONS IN THE COBALT DISTRICT, ONTARIO. By E. Higgins. E. & M. J., vol. 87, p. 1267. 14 columns. I.
- THE COBALT DISTRICT IN 1909. By R. E. Hore. E. & M. J., vol. 89, p. 703. 4 columns. I.
- THE SOUTH LORRAINE SILVER DISTRICT, ONTARIO, CANADA. By W. B. Phillips. E. & M. J., vol. 87, p. 214. 4 columns.
- THE SILVER ISLET VEIN, LAKE SUPERIOR. By W. McDermott. T. I. M. & M., vol. 18, p. 220. 34½ pages
- OCCURRENCE OF ORE IN SILVER ISLET MINE. T. I. M. & M., vol. 18, p. 222. 4 pages.

THE TUNGSTEN ORES OF CANADA E & M. J., vol. 88, p. 729. 2½ columns.

TUNGSTEN AND THE MOOSE RIVER SCHEELITE VEINS. By A. A. Hayward. J M Soc. N S., vol. 15, p. 65 14 pages.

THE OCCURRENCES OF TUNGSTEN ORES IN CANADA By T. L. Walker. J. C. M I, vol 11, p. 367. 4½ pages.
See also MISCELLANEOUS PRODUCTION.

The Carolinas

MINERAL RESOURCES OF SOUTH CAROLINA Min. Mag., vol 9, p. 1, 22 pages; p 103, 16 pages; p. 355, 4 pages.

THE MINERALS OF NORTH CAROLINA. By F A Genth. U. S. G S., Bull. 74. 119 pages 1891.

MINOR MINERALS OF NORTH CAROLINA. By W. C. Kert. U. S. G. S., Mineral Resources, 1882, vol. 17. 3 pages.

THE MINES OF SOUTH CAROLINA. By H L. Scaife. E & M. J., vol. 86, p. 1212. 4½ columns.

THE DAN RIVER COALFIELD IN NORTH CAROLINA E. & M. J., vol. 89, p. 1239. 2 columns.

THE COAL LANDS OF THE DEEP RIVER COMPANY IN NORTH CAROLINA. By W. R. Johnson. Min Mag, vol 1, p. 352. 13 pages.

THE PROGRESS OF GOLD MINING IN NORTH CAROLINA. By E. W. Lyon. E. & M. J., vol. 87, p. 293. 13½ columns. I.

ORE-DEPOSITS OF THE EASTERN GOLD-BELT OF NORTH CAROLINA By W. O. Crosby. T. A. I. M. E., vol. 38, p. 849. 9 pages.

NOTES ON THE GOLD REGIONS OF NORTH AND SOUTH CAROLINA. By O. P. Leeds. Min. Mag., vol. 2, p. 27. 6 pages; p. 357, 12 pages. I.

MICA DEPOSITS OF WESTERN NORTH CAROLINA. By D. B. Sterrett. U. S. G. S., Bull. 315, p. 400. 22 pages. I. 1906.

MICA DEPOSITS OF NORTH CAROLINA By D. B. Sterrett. U. S. G. S., Bull. 430, p. 593. 48 pages. I. 1909

MONAZITE AND MONAZITE MINING IN THE CAROLINAS By J. H. Pratt and D. B. Sterrett. T. A. I. M. E., vol. 40, p. 313. 28 pages. I.

MONAZITE DEPOSITS OF THE CAROLINAS. By D. B. Sterrett. U. S. G. S., Bull. 340, p. 272. 14 pages. I. 1907.

TIN DEPOSITS OF THE CAROLINAS. By S. M. Ball. E & M J., vol 87, p. 1130. 2½ columns.

Central America

MINING AND TRANSPORTATION IN GUATEMALA. By C. C. Sample E. & M. J., vol. 85, p. 1194. 4½ columns.

MINES AND MILL OF MONTEZUMA MINES, COSTA RICA. By S. F. Shaw E. & M. J, vol. 90, p. 715. 6 columns. I.

Chile

MINES AND MINING OPERATIONS IN CHILE, SOUTH AMERICA Min. Mag., vol 3, p 29. 13 pages.

MINING AND METALLURGY IN CHILE. By F. A. Sundt. M. & M., vol. 30, p. 646. 4 columns. Map.

RECENT MINING WANDERINGS IN BURMA, CHILE, and BOLIVIA. By J. H. Curle. Min. & Sci. Press, vol. 96, p. 879. 7½ columns.

MINERALS OF CHILE, SOUTH AMERICA. By J. L. Smith. Min. Mag, vol. 5, p. 371. 11½ pages.

GEOLOGICAL FEATURES OF THE COAL-FIELDS OF CHILE. T. I. M. E., vol 38, p. 34. 4 pages.

THE COAL-FIELDS AND COLLIERIES OF THE REPUBLIC OF CHILE. By A. Russell. T. I. M. E., vol. 38, p. 29. 54 pages. I.

THE CALAMA COPPER DISTRICT, CHILE.
By F. A. Smith. M. & M., vol. 31,
p. 473. 4 columns. I.

THE BRADEN COPPER MINES, CHILE.
By W. Braden. M. & M., vol. 30,
p. 506. 1½ columns

THE COLLAHUASI COPPER DISTRICT,
CHILE. By R. Hawxhurst. Min.
Mag., London, vol. 3, p. 271. 14
columns. I.

THE PODEROSA COPPER MINE, COL-
LAHUASI, CHILE. By Robt. Hawx-
hurst, Jr. E. & M. J., vol. 85, p. 490.
4 columns.

GOLD REGION OF THE STRAIT OF
MAGELLAN. By R. A. T. Penrose.
Min. & Sci. Press, vol. 98, p. 153.
3½ columns.

NITRATE OF SODA INDUSTRY OF CHILE.
By S. H. Loram. Min. & Sci. Press,
vol. 100, p. 125, 8 columns, I.; p.
180, 10 columns. I.

THE NITER INDUSTRY OF CHILE. E.
& M. J., vol. 90, p. 19. 14½ col-
umns. I.

China

GEOLOGICAL AND MINING NOTES ON
CHINA. By A. Hassam. T. I. M.
E., vol. 36, p. 353. 12 pages.

MINERAL RESOURCES OF MANCHURIA.
By T. T. Read. Min. Mag., Lon-
don, vol. 2, p. 121. 4½ columns. I.

NORTHERN MANCHURIA. By C. W.
Purington. Min. Mag., vol. 4, p. 53.
9½ columns. I.

COAL IN CHINA. Min. & Sci. Press,
vol. 20, p. 42. ½ column.

COAL MINING IN MANCHURIA. By T.
T. Read. Min. Mag., London, vol.
1, p. 215. 8 columns. I.

THE FUSHUN COLLIERY, SOUTH MAN-
CHURIA. By W. A. Moller. T. A.
I. M. E., vol. 41, p. 241. 4 pages.

THE PINGHSIANG COLLIERY, CHINA.
By K. P. Swensen. Min. & Sci.
Press, vol. 101, p. 564. 7 columns. I.

COAL MINING IN CHINA. By T. T.
Read. Min. & Sci. Press, vol. 98,
p. 44. 5 columns. Map.

MINING IN NORTHERN CHINA. By F.
L. Cole. Min. & Sci. Press, vol. 98,
p. 584. 4½ columns. Map.

THE COAL-FIELDS BETWEEN SHAN
HAI KUAN AND MUKDEN, NORTH
CHINA. By W. A. Moller. T. I.
M. E., vol. 38, p. 460. 15 pages. I.

COAL MINING IN NORTH CHINA. E. &
M. J., vol. 85, p. 366. 2½ columns.

GOLD MINES OF TIBET. By A. Del
Mar. Min. & Sci. Press, vol. 100,
p. 254. 3½ columns.

IRON, STEEL AND FUEL IN CHINA. By
W. D. B. Dodson. Min. & Sci.
Press, vol. 97, p. 494. 2½ columns.

THE TAYEH IRON MINES, CHINA. By
A. J. Saltzer. Min. & Sci. Press,
vol. 100, p. 546. 5 columns. I.

LEAD MINES IN SHAN STATES, CHINA.
E. & M. J., vol. 88, p. 550. 16½
columns. I.

SILVER-LEAD MINES OF BAWDWIN,
SHAN STATES, CHINA. By T. D.
La Touche and J. C. Brown. E. &
& M. J., vol. 88, p. 550. 16½ col-
umns. I.

TIN PRODUCTION IN THE PROVINCE OF
YUNNAN, CHINA. By W. F. Col-
lins. T. I. M. & M., vol. 19, p. 187.
24 pages. I.

OCCURRENCE OF TIN IN THE PROVINCE
OF YUNNAN, CHINA. T. I. M. &
M., vol. 19, p. 188. ½ page.

See also MISCELLANEOUS PRODUCTION.

Colombia and The Guianas

MINERAL RESOURCES OF THE SOUTH
OF COLOMBIA, SOUTH AMERICA. By
F. P. Gamba. E. & M. J., vol. 88,
p. 312. 3½ columns.

ECONOMIC CONDITIONS IN COLOMBIA.
By F. L. Garrison. Min. & Sci.
Press, vol. 98, p. 550. 6 columns.
Map.

NOTES ON THE ALUMINUM INDUSTRY
IN FRANCE. By T. Callot. E. & M.
J., vol. 89, p. 1229. 3 columns. I.

- COAL DEPOSITS IN COLOMBIA Min. & Sci. Press, vol 98, p. 220. 1½ columns I.
- THE FUTURE GOLD-OUTPUT OF COLOMBIA By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 217. 12½ columns. I.
- PASTO GOLD DISTRICT, COLOMBIA Min. & Sci. Press, vol 100, p. 583. 2 columns I.
- QUARTZ MINES IN COLOMBIA, SOUTH AMERICA. By F. F. Sharpless. Min. & Sci. Press, vol. 97, p. 422 4½ columns. I.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. Mag., London, vol. 2, p. 369. 15½ columns. I.
- THE FUTURE GOLD-OUTPUT OF COLOMBIA. By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- ALLUVIAL GOLD DEPOSITS AND MINING IN COLOMBIA. By P. A. Alig. E. & M. J., vol. 90, p. 1098. 4 columns.
- COLOMBIAN GOLD PLACERS T. A. I. M. E., vol. 39, p. 418. 1 page. Table.
- GEOLOGY OF THE PLATINUM DEPOSITS OF COLOMBIA. By J. C. Costello. Min. & Sci. Press, vol. 98, p. 826. 3½ columns. I.
- THE GOLD DEPOSITS OF FRENCH GUIANA. E. & M. J., vol. 87, p. 400. 2½ columns. I.
- THE GOLD-FIELDS OF FRENCH GUIANA AND THE NEW METHOD OF DREDGING By A. F. J. Bordeaux. T. A. I. M. E., vol. 41, p. 567. 28 pages. I.
- GOLD-BEARING GRAVELS IN FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 575. 10 pages.
- THE HISTORICAL DEVELOPMENT OF COLORADO VIEWED FROM A GEOLOGICAL STANDPOINT By T. A. Rickard. Min. & Sci. Press, vol 96, p. 295 4 columns. I.
- THE MINING AND SMELTING INDUSTRY OF COLORADO. By F. Guiterman. Min. & Sci. Press, vol. 101, p. 699. 3½ columns I.
- NOTES ON THE ECONOMIC GEOLOGY OF SOUTHEASTERN GUNNISON COUNTY, COLORADO. By J. M. Hull U. S. G. S., Bull. 380, p. 21. 20 pages. I. 1908.
- CLAY DEPOSITS OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By M. K. Shaler and J. H. Gardner. U. S. G. S., Bull. 315, p. 296. 6½ pages. 1906.
- PICTOU COAL FIELD LORE M. & M., vol. 31, p. 179. ½ column.
- THE YAMPA COAL FIELD, ROUTT COUNTY, COLORADO By N. M. Fenneman and H. S. Gale. U. S. G. S., Bull. 285, p. 226. 14 pages. I. 1905.
- THE SOUTH PARK COAL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 381, p. 307. 10 pages. I. 1908.
- THE GRAND MESA COAL FIELD, COLORADO. By W. T. Lee. U. S. G. S., Bull. 341, p. 316. 17 pages. I. 1907.
- COAL FIELDS OF THE DANFORTH HILLS AND GRANDHOGBACK IN NORTH-WESTERN COLORADO. By H. S. Gale. U. S. G. S., Bull. 316, p. 264. 40 pages. I. 1906.
- THE TRINIDAD COAL-FIELD, COLORADO. By G. B. Richardson. U. S. G. S., Bull. 381, p. 379. 68 pages. I. 1908.
- ROUTT COUNTY, COLORADO, COALS. By R. L. Herrick. M. & M., vol. 29, p. 230. 9½ columns. I.
- THE CAÑON CITY COAL FIELD, COLORADO. By C. W. Washburne.

Colorado

- A GAZETTEER OF COLORADO. By H. Gannett. U. S. G. S., Bull. 291, 185 pages. 1906.

- U. S. G. S., Bull. 381, p. 341. 38 pages. I. 1908.
- THE COLORADO SPRINGS COAL FIELDS, COLORADO. By M. L. Goldman. U. S. G. S., Bull. 381, p. 317. 24 pages. I. 1908.
- COAL OF THE DENVER BASIN, COLORADO. By G. C. Martin. U. S. G. S., Bull. 381, p. 297. 10 pages. 1908.
- THE COAL FIELD BETWEEN DURANGO, COLORADO AND MONERO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.
- THE DURANGO COAL DISTRICT, COLORADO. By J. A. Taff. U. S. G. S., Bull. 316, p. 321. 18 pages. I. 1906.
- THE BOOK CLIFFS COAL FIELD, BETWEEN GRAND RIVER, COLORADO, AND SUNNYSIDE, UTAH. By G. V. Richardson. U. S. G. S., Bull. 316, p. 302. 18 pages. I. 1906.
- RECONNAISSANCE OF THE BOOK CLIFFS COAL FIELD. By G. B. Richardson. U. S. G. S., Bull. 371. 54 pages. I. 1909.
- MINING COAL IN SOUTHERN COLORADO. By K. S. Guiterman. E. & M. J., vol. 88, p. 1009. 20½ columns. I.
- COAL FIELDS OF SOUTHERN COLORADO. M. & M., vol. 30, p. 588. 3½ columns. I.
- COAL MINING AT PRIMERO, COLORADO. By R. L. Herrick. M. & M., vol. 30, p. 598. 2½ columns. I.
- THE DELAGUA COAL MINES, COLORADO. By F. W. Whiteside. M. & M., vol. 29, p. 317. 4½ columns. I.
- THE EVERGREEN COPPER-DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E., vol. 38, p. 751. 15 pages. I.
- NOTES ON COPPER DEPOSITS IN CHAFFEE, FREMONT, AND JEFFERSON COUNTIES, COLORADO. By W. Lindgren. U. S. G. S., Bull. 340, p. 157. 18 pages. I. 1907.
- THE EVERGREEN COPPER-DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E., vol. 38, p. 751. 15 pages. I.
- FLUORSPAR IN COLORADO. By E. F. Burchard. Min. & Sci. Press, vol. 99, p. 258. 6½ columns. Map.
- COLORADO'S RARE METAL INDUSTRY. By H. Fleck. M. & M., vol. 30, p. 63. 3½ columns.
- GEOLOGICAL DISTRIBUTION OF THE PRECIOUS METALS IN COLORADO. By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 89, 11 columns, I.; p. 150, 8 columns, I., p. 316, 9½ columns. I.
- LESSONS FROM GILPIN COUNTY PRACTICE. By G. E. Collins. Min. & Sci. Press, vol. 101, p. 366. 11½ columns.
- THE ALICE MINE: Colorado's Largest Ore Body. By R. L. Herrick. M. & M., vol. 29, p. 294. 6 columns. I.
- REPORT ON THE POVERTY GULCH MINE. By C. W. Henderson. M. & M., vol. 31, p. 586, 5½ columns, I.; p. 694, 7 columns. I.
- GOLD ORE NEAR NEWCASTLE, COLORADO. By F. Rickard. Min. & Sci. Press, vol. 99, p. 503. 1 column. I.
- THE SAN JUAN REGION, COLORADO. By T. T. Read. Min. & Sci. Press, vol. 97, p. 632, 8 columns, I.; p. 668, 10 columns. I.
- GOLD DEPOSITS OF SAN JUAN, COLORADO. By W. C. Prosser. M. & M., vol. 31, p. 335. 5 columns. I.
- MINING IN THE SAN JUAN, COLORADO. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 610, 5½ columns, I.; p. 737, 6½ columns, I.; p. 865, 3½ columns. I.
- THE CRESSON MINE, CRIPPLE CREEK, COLORADO. By R. L. Herrick. M. & M., vol. 31, p. 735. 11½ columns. I.

- PRIMARY GOLD IN A COLORADO GRANITE.** By J. B. Hastings. T. A. I. M. E., vol. 39, p. 97. 6 pages. I
- LA PLATA MOUNTAINS, COLORADO.** By R. H. Toll. Min. & Sci. Press, vol. 97, p. 741. 6½ columns. Map.
- TREASURE MOUNTAIN, COLORADO.** By C. W. Purington. Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.
- LAKE FORK EXTENSION OF THE SILVERTON MINING AREA, COLORADO.** By L. W. Woolsey. U. S. G. S., Bull. 315, p. 26. 5 pages. 1906.
- MINING IN GEORGETOWN QUADRANGLE.** By S. H. Ball. M. & M., vol. 30, p. 205. 9½ columns. Map.
- HAHNS PEAK, COLORADO.** E. & M. J., vol. 86, p. 809. 2½ columns. I.
- GOLD PLACER DEPOSITS NEAR LAY, ROUTT COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 340, p. 84. 13 pages. I. 1907.
- GYPSUM OF THE UNCOMPAGRE REGION, COLORADO.** By C. E. Sieben-thal. U. S. G. S., Bull. 285, p. 401. 4 pages. I. 1905.
- THE TAYLOR PEAK AND WHITEPINE IRON-ORE DEPOSITS, COLORADO.** By E. C. Harder. U. S. G. S., Bull. 380, p. 188. 10½ pages. I. 1908.
- TAYLOR PEAK IRON DEPOSITS.** By E. C. Harder. Min. & Sci. Press, vol. 100, p. 615. 5 columns. I.
- OCCURRENCE OF LEAD ORE AT LEADVILLE.** E. & M. J., vol. 89, p. 263. 4 columns. I.
- THE LEADVILLE DOWNTOWN DISTRICT.** Min. & Sci. Press, vol. 95, p. 58. 1 column.
- LEADVILLE, COLORADO, ZINC DEPOSITS.** By H. E. Burton. M. & M., vol. 31, p. 436. 2 columns.
- RECENT DEVELOPMENTS ON IRON HILL, LEADVILLE.** By G. O. Orgall. E. & M. J., vol. 89, p. 261. 16 columns. I.
- THE MONTEZUMA MINING DISTRICT, COLORADO.** By E. A. Ritter. E. & M. J., vol. 85, p. 241. 9½ columns. I.
- THE NIOLVARA LIMESTONE OF NORTHERN COLORADO AS A POSSIBLE SOURCE OF PORTLAND CEMENT MATERIAL.** By G. C. Martin. U. S. G. S., Bull. 380, p. 314. 13 pages. I. 1908
- THE FLORENCE OIL FIELD, COLORADO.** By C. W. Washburne. U. S. G. S., Bull. 381, p. 517. 28 pages. I. 1908.
- THE DEVELOPMENT IN THE BOULDER OIL FIELD, COLORADO.** By C. W. Washburne. U. S. G. S., Bull. 381, p. 514. 2½ pages. 1908.
- GEOLOGY OF THE RANGEL OIL DISTRICT, COLORADO, WITH A SECTION ON THE WATER SUPPLY.** By H. S. Gale. U. S. G. S., Bull. 350, 60 pages. I. 1908.
- DESTRUCTION OF THE SALT-WORKS OF THE COLORADO DESERT BY THE SALTON SEA.** By W. P. Blake. T. A. I. M. E., vol. 38, p. 848. 1 page.
- TUNGSTEN INDUSTRY OF BOULDER COUNTY, COLORADO, IN 1908.** By R. D. George. E. & M. J., vol. 87, p. 1055. 2 columns. Map.
- TUNGSTEN IN SAN JUAN COUNTY, COLORADO.** By W. C. Prosser. E. & M. J., vol. 90, p. 320. 2 columns. I.
- OCCURRENCES OF VANADIUM NEAR TELLURIDE, COLORADO.** By E. R. Zolniski. E. & M. J., vol. 85, p. 1152. 4 columns. I.
- CARNOTITE IN RIO BLANCO COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 315, p. 110. 8 pages. I. 1906.
- CARNOTITE AND ASSOCIATED MINERALS IN WESTERN ROUTT COUNTY, COLORADO.** By H. S. Gale. U. S. G. S., Bull. 340, p. 257. 6 pages. 1907

Connecticut

- A GEOGRAPHIC DICTIONARY OF CONNECTICUT.** By H. Gannett. U. S. G. S., Bull. 117. 67 pages. 1894.

THE OLD BRISTOL COPPER MINE, CONNECTICUT By C S Richardson. *Min. Mag.*, vol 3, p. 251. 5 pages.

The Dakotas

THE SENTINEL BUTTE LIGNITE FIELD, NORTH DAKOTA AND MONTANA By A. G. Leonard and C. D. Smith. *U. S. G. S.*, Bull. 341, p. 15. 21 pages. I. 1907.

THE WASHBURN LIGNITE FIELD, NORTH DAKOTA. By C. D. Smith. *U. S. G. S.*, Bull. 381, p. 19. 11 pages. I. 1908.

THE FORT BERTHOLD INDIAN RESERVATION LIGNITE FIELD, NORTH DAKOTA. By C. D. Smith. *U. S. G. S.*, Bull. 381, p. 30. 10 pages. I. 1908.

THE BOTTINEAU GAS FIELD, NORTH DAKOTA. By J G. Barry. *E. & M. J.*, vol. 87, p. 1089. 3 columns.

THE BLACK HILLS OF SOUTH DAKOTA. By W. H. Storms. *Min. & Sci. Press*, vol. 101, p. 114, 5 columns, I.; p. 144, 7 columns, I.; p. 264, 7 columns, I.; p. 500, 6 columns; p. 571, 6 columns; p. 669, 6 columns. I.

DRY PLACERS OF THE BLACK HILLS. *Min. & Sci. Press*, vol. 101, p. 571. 1½ columns.

PLACERS OF THE BLACK HILLS, SOUTH DAKOTA. *Min. & Sci. Press*, vol. 101, p. 573. 2 columns.

MICA DEPOSITS OF SOUTH DAKOTA. By D. B. Sterrett. *U. S. G. S.*, Bull. 380, p. 382. 3 pages. 1908.

MICA DEPOSITS IN SOUTH DAKOTA. By D. B. Sterrett. *Min. & Sci. Press*, vol. 99, p. 826. 4 columns. I.

TIN, TUNGSTEN, AND TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. *U. S. G. S.*, Bull. 380, p. 131. 32 pages. I. 1908.

TUNGSTEN DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. *U. S. G. S.*, Bull. 380, p. 131. 32 pages. I. 1908.

TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. *U. S. G. S.*, Bull. 380, p. 131. 32 pages. I. 1908.

Delaware

GAZETTEER OF DELAWARE. By H. Gannett. *U. S. G. S.*, Bull. 230. 15 pages. 1904

THE EOCENE DEPOSITS OF THE MIDDLE ATLANTIC SLOPE IN DELAWARE, MARYLAND, AND VIRGINIA. By W. B. Clark. *U. S. G. S.*, Bull. 141. 167 pages. I. 1896.

East Indies—Malaysia

GOLD MINING INDUSTRY IN THE DUTCH EAST INDIES. By E. A. Winton. *E. & M. J.*, vol. 88, p. 513. 4½ columns. Map

OCCURRENCE OF AURIFEROUS AND STANNIFEROUS TOURMALINE IN SUMATRA. By L. Hundeshagen. *E. & M. J.*, vol. 87, p. 1003. ½ column.

MINING IN THE MALAY STATES. By E. S. Marks. *Min. & Sci. Press*, vol. 98, p. 31. 10½ columns. I.

TIN MINING IN ULU SELANGOR, FEDERATED MALAY STATES. By E. Nightingale. *T. I. M. & M.*, vol. 17, p. 159. 12½ pages. I.

MINING LORE TIN IN MALAYA. *E. & M. J.*, vol. 86, p. 371. 4 columns.

Egypt

GOLD MINING IN EGYPT. By C. S. Herzig. *Min. & Sci. Press*, vol. 95, p. 212. 4½ columns. I.

England

HOLYWELL-HALKYN TUNNEL AND MINES, HOLYWELL, NORTH WALES. By J. P. Jones. *T. I. M. E.*, vol. 36, p. 197. 5 pages. I.

MINING IN NEW SOUTH WALES. *Min. & Sci. Press*, vol. 95, p. 182. ½ column.

THE 1906 BOOM IN CORNWALL. By W. Thomas. *Min. Mag.*, London, vol. 1, p. 233. 4 columns.

THE CHINA-CLAY INDUSTRY OF CORNWALL. By J. H. Collins. *Min. Mag.*, vol. 4, p. 449. 11½ columns. I.

THE KENT COALFIELD IN ENGLAND. E. & M. J., vol. 87, p. 910. 1½ columns.

THE WEMYSS COAL-FIELD, ENGLAND. By J. Gemmell. *T. I. M. E.*, vol. 36, p. 555. 20 pages.

SCOTTISH "EENIE" COAL. By C. T. Clough. *T. I. M. E.*, vol. 37, p. 2. 10 pages. I.

AN ENGLISH GOLD MINE. E. & M. J., vol. 86, p. 98. ½ column.

THE BRITISH GOLD FIELDS, ENGLAND. *Min. Mag.*, vol. 2, p. 282, 3 pages; p. 376, 2 pages.

THE HEMATITE MINES OF CUMBERLAND, ENGLAND. By L. W. Mayer. E. & M. J., vol. 86, p. 358. 18½ columns. I.

THE GREENSIDE LEAD MINES, CUMBERLAND, ENGLAND. By E. T. Borlase. E. & M. J., vol. 85, p. 297. 10 columns. I.

OIL-SHALE AT PUMPHERSTON, SCOTLAND. By W. Caldwell. *T. I. M. E.*, vol. 36, p. 581. 9½ pages. I.

THE PUMPHERSTON, SEA FIELD, AND DEANS WORKS OF THE PUMPHERSTON OIL COMPANY. *T. I. M. E.*, vol. 36, p. 602. 8 pages.

SLATE MINING IN WALES AND CAUSE OF ITS DECLINE. E. & M. J., vol. 85, p. 145. 7½ columns. I.

THE RED RIVER, CORNWALL, ENGLAND. By E. Walker. *Min. & Sci. Press*, vol. 97, p. 849. 2 columns.

Florida

NOTES ON THE CLAYS OF FLORIDA. By G. C. Matson. *U. S. G. S.*, Bull. 380, p. 346. 10 pages. 1908.

FULLER'S EARTH, KAOLIN AND PEAT IN FLORIDA. By E. H. Sellards. E. & M. J., vol. 85, p. 1187. 1 column.

DEVELOPMENTS IN THE FLORIDA PHOSPHATE INDUSTRY. By C. G. Memminger. E. & M. J., vol. 89, p. 184. 3 columns.

PRODUCTION OF PHOSPHATE ROCK IN FLORIDA DURING 1908. By E. H. Sellards. E. & M. J., vol. 88, p. 129. 1½ columns.

PHOSPHATE MINING IN FLORIDA. E. & M. J., vol. 85, p. 597. 1 column.

France

THE MINES OF FRANCE. *Min. Mag.*, vol. 4, p. 237. 6 pages.

GOLD MINING IN FRANCE. By J. A. Rickard. *Min. Mag.*, London, vol. 1, p. 283. 4 columns. I.

GOLD IN FRANCE. *P. C. M. & M. Soc. S. A.*, vol. 7, p. 315. ½ column.

THE GREATEST GOLD MINE OF FRANCE. By T. T. Read. *Min. Mag.*, vol. 4, p. 209. 7 columns. I.

THE THREE PRODUCING GOLD MINES OF FRANCE. By E. Walch. E. & M. J., vol. 87, p. 792. 6 columns. I.

Georgia

A COMMERCIAL OCCURRENCE OF BARITE NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Pholen. *U. S. G. S.*, Bull. 340, p. 458. 4½ pages. I. 1907.

A NEW DISCOVERY OF BAUXITE IN GEORGIA. By Otto Veatch. E. & M. J., vol. 85, p. 688. 1½ columns.

KAOLINS AND FIRE CLAYS OF CENTRAL GEORGIA. By O. Veatch. *U. S. G. S.*, Bull. 315, p. 303. 12 pages. I. 1906.

CANTON COPPER MINE, CHEROKEE COUNTY, GEORGIA. By J. Derby. *Min. Mag.*, vol. 5, p. 395. 2½ pages.

FULLER'S EARTH OF SOUTHWESTERN GEORGIA AND WESTERN FLORIDA. By T. W. Vaughan. *U. S. G. S.*, Mineral Resources, 1901. 13 pages.

GOLD DEPOSITS OF GEORGIA. By E. K. Soper. *Min. & Sci. Press*, vol. 100, p. 923. 3½ columns.

MOORE'S GOLD MINES, DAHLONEGA, GEORGIA. Min. Mag., vol. 2, p. 24. 3 pages.

THE GOLD PLACERS OF LUMPKIN COUNTY, GEORGIA. Min Mag., vol. 10, p. 457. 20 pages.

GRAPHITE DEPOSITS NEAR CARTERSVILLE, GEORGIA. By C W Hayes and W. C Pholen. U S G S., Bull 340, p 463 2½ pages. 1907.

IRON ORES NEAR ELLIJAY, GEORGIA By W C. Pholen. U S G S., Bull 340, p. 330. 5 pages 1907.

REVIEW OF FOSSIL IRON ORE DEPOSITS OF GEORGIA. By S N. Ball. E. & M. J., vol 88, p 200. 13½ columns. I

GEORGIA BROWN IRON-ORE WASH-ERIES. By E F. McCrossin. M. & M., vol 31, p 294. 2½ columns I.

Germany

UPPER SILICIA COAL MINES. By F. Haas. M. & M., vol. 30, p 471, 5½ columns.

GERMAN DIATOMACEOUS EARTH. E. & M. J., vol. 87, p. 938. ¾ column.

THE LORRAINE DEPOSITS OF OOLITIC IRON ORE, GERMANY By Tony Callot. E & M. J., vol. 87, p. 1221. 16 columns. I.

THE ILSEDE HUTTE IRON-MINES AT PEINE, GERMANY. By L. W. Mayer. T. A. I. M. E., vol. 39, p 351. 6½ pages I.

**LEAD MINING AT MECHERNICH, PRUS-
SLA.** By L. W. Mayer. E & M J., vol. 86, p. 169. 11½ columns. I.

SILVER-LEAD MINING IN FREIBERG, GERMANY. By W. G Brown. E & M. J., vol. 87, p. 987. 5½ columns

GEYSERITE: A Variety of Opal, in Germany. E. & M. J., vol. 90, p. 820 1 column. I.

Idaho

NOTES ON GEOLOGY OF SNOW STORM MINE, IDAHO. By G. Huston. E. & M. J., vol. 90, p. 1109. 3 columns.

SNOWSTORM COPPER DEPOSIT, IDAHO. Min. & Sci. Press, vol 97, p 701. 2½ columns I.

NOTES ON THE FORT HALL MINING DISTRICT, IDAHO By F. B. Weeks and V. C. Heikes U. S. G. S., Bull. 340, p. 175 10 pages. I. 1907.

THE WHITE KNOB COPPER-DEPOSITS, MACKAY, IDAHO By J F Kemp and C G Gunther. T. A. I. M. E., vol 38, p 269. 29 pages I.

THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT. By H. S. Auerbach. E & M J, vol. 86, p. 65. 17 columns I

ORE BODIES OF THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT E. & M. J., vol. 86, p. 67. 4 columns. I.

ATLANTA GOLD DISTRICT, IDAHO. By R. N. Bell. E. & M. J., vol. 86, p 176 4 columns. I.

BOISE BASIN, IDAHO By W A. Scott. Min & Sci Press, vol 101, p. 76. 6 columns. I.

THE ORE BODIES OF THE BUNKER HILL AND SULLIVAN MINE. Min. & Sci. Press, vol. 97, p 775. 6 columns I.

AN OCCURRENCE OF MONAZITE IN NORTHERN IDAHO By F. C. Schrader. U. S G S, Bull. 430, p. 184. 7 pages. I. 1909.

TUNGSTEN ORE DEPOSITS OF THE CŒUR D'ALENE. By H. S. Auerbach. E. & M. J., vol 86, p. 1146. 6½ columns. I.

See also MISCELLANEOUS PRODUCTION.

Illinois

CONCRETE MATERIALS PRODUCED IN THE CHICAGO DISTRICT. By E. F. Burchard. U. S G. S., Bull. 340, p. 383. 28 pages. I. 1907.

STUDIES OF ILLINOIS COALS. By H. F. Bain T. A. I. M. E., vol. 40, p. 3. 72 pages. I.

BIBLIOGRAPHY OF ILLINOIS COAL AND ITS UTILIZATION. J. W. Soc. E., vol. 14, p. 326. 2½ pages.

ILLINOIS COAL STATISTICS. M & M., vol. 31, p. 357. $\frac{1}{2}$ column

THE COAL MINING INDUSTRY IN ILLINOIS DURING 1908 E. & M J, vol. 88, p. 77 4 columns.

THE KINGSTON COAL MINES, PEORIA COUNTY, ILLINOIS. By C. S. Richardson. Min. Mag., vol. 4, p. 379. $7\frac{1}{2}$ pages; vol 5, p. 1, 24 pages.

THE ILLINOIS COAL FIELD. By A. Bement. J. W. Soc. E., vol 14. p. 305. 70 pages. I.

THE COAL-RESOURCES OF ILLINOIS. T. A. I. M. E., vol. 40, p. 7. 10 pages. I.

THE ILLINOIS COAL FIELD. By A. Bement. M & M., vol. 30, p. 709 7 columns I

THE ILLINOIS COAL FIELD. By H. H. Stock. M. & M, vol 31, p. 54 6 columns Map.

COAL INVESTIGATION IN THE SALINE-GALLATIN FIELD, ILLINOIS, AND THE ADJOINING AREA. By F W De Wolf. U. S. G. S., Bull 316, p. 116. 20 pages. I. 1906.

THE OOLITIC LIMESTONE INDUSTRY AT BEDFORD AND BLOOMINGTON, ILLINOIS. By J. A. Udden. U. S. G. S., Bull. 430, p. 335. 12 pages. 1909.

PETROLEUM FIELDS OF ILLINOIS. By H. F. Bain. Min. & Sci. Press, vol. 99, p. 153. $4\frac{1}{2}$ columns. I.

PUMPING AND SHIPPING OIL IN EASTERN ILLINOIS. By R. S. Blatchley. Min. & Sci. Press, vol. 99, p. 678. 6 columns. I

India

INDIA'S MINERAL PRODUCTION. E. & M. J., vol. 85, p. 1050. $2\frac{1}{2}$ columns

PETROLEUM IN BURMA. By E. A. Wakefield. Min. & Sci. Press, vol. 99, p. 500. $1\frac{1}{2}$ columns.

A MANGANESE DEPOSIT IN SOUTHERN INDIA. By R. O. Ahles. T. I. M. & M., vol. 18, p. 133. 20 pages. I.

MANGANESE DEPOSITS IN SOUTHERN INDIA E. & M J, vol 87, p. 955. $2\frac{1}{2}$ columns

RUBY MINES OF THE MOGOK VALLEY, BURMA. Min. & Sci. Press, vol 99, p. 231. $1\frac{1}{2}$ columns.

Indiana

STRATIGRAPHY AND COAL BEDS OF THE INDIANA COAL FIELD. By G. H. Ashley U. S. G. S., Bull. 381, p. 9 10 pages. 1908

MINING COAL IN SOUTHERN INDIANA. By F W. Parsons E & M J., vol. 90, p. 869. 11 columns. I.

NATURAL GAS FIELD OF INDIANA. By A. J. Phinney. U. S. G. S., 16th Ann Rept., pt. 1, pp 579-742. 1889-90 I.

GLASS-SAND INDUSTRY OF INDIANA, KENTUCKY AND OHIO. By E. F. Burchard. U. S. G. S., Bull 315, p. 361. 16 pages. 1906.

PEAT BEDS IN INDIANA. E. & M J., vol. 88, p. 789. $\frac{3}{4}$ column.

THE TRENTON LIMESTONE AS A SOURCE OF PETROLEUM AND INFLAMMABLE GAS IN OHIO AND INDIANA. By E. Orton. U. S. G. S., 8th Ann Rept. pt. 2, pp. 475-662. 1886-87. I.

Iowa

THE GEOLOGY, MINING AND PREPARATION OF BARITE IN WASHINGTON COUNTY, MISSOURI. By A. A. Steel. T. A. I. M. E., vol 40, p. 711. $32\frac{1}{2}$ pages. I.

CLAY RESOURCES OF THE ST. LOUIS DISTRICT, MISSOURI. By N. M. Fenneman. U. S. G. S., Bull. 315, p. 315. $6\frac{1}{2}$ pages. I. 1906.

COALFIELDS OF IOWA AND MISSOURI. By H. Hinds. M. & M., vol. 31, p. 80. $4\frac{1}{2}$ columns. I. Map.

LEAD AND ZINC MINING IN IOWA. E. & M. J., vol. 86, p. 805. 1 column.

Jamaica

COPPER IN JAMAICA. Min. & Sci. Press, vol. 99, p. 299. $\frac{1}{2}$ column.

Japan

MINING INDUSTRY IN JAPAN. By T. Haga. Min. & Sci. Press, vol. 101, p. 306. $1\frac{1}{2}$ columns.

THE MINERAL RESOURCES OF KOREA. By H. R. Robbins T A I M E, vol. 39, p. 260. 14 pages I.

NOTES ON THE TAKASIMA COAL MINES, NAGASAKI, JAPAN By E. W. Nardin. T. Au I M E, vol. 8, pt. 1, p. 81. 6 pages I

THE KAPSON MINES, KOREA Min. & Sci. Press, vol. 99, p. 666. $2\frac{1}{2}$ columns

THE KOSAN MINE, KOREA. By A. D. Weigall Min & Sci. Press, vol. 97, p. 878. $2\frac{1}{2}$ columns

THE KOSAKA COPPER MINE OF JAPAN Min & Sci. Press, vol. 101, p. 503. 1 column.

GOLD MINING IN KOREA, 1910. By J. D. Hubbard. Min & Sci. Press, vol. 101, p. 236. 5 columns. I.

GOLD DEPOSITS IN JAPAN. Min. & Sci. Press, vol. 101, p. 842. $2\frac{1}{2}$ columns.

THE PLACER DEPOSITS OF KOREA. T. A. I. M. E., vol. 39, p. 266. 2 pages. I.

Kansas

A GAZETTEER OF KANSAS By H. Gannett. U. S. G. S., Bull. 154. 246 pages. I. 1898.

ECONOMIC GEOLOGY OF THE IOLA QUADRANGLE, KANSAS. By G. I. Adams, E. Haworth, and W. R. Crane. U. S. G. S., Bull. 238. 83 pages. I. 1904.

ECONOMIC GEOLOGY OF THE INDEPENDENCE QUADRANGLE, KANSAS. By F. C. Schrader and E. Haworth. U. S. G. S., Bull. 296. 74 pages. I. 1906.

SOUTHERN KANSAS COAL DISTRICT. By L. L. Wittich M. & M., vol. 31, p. 668. $7\frac{1}{2}$ columns. I.

THE KANSAS STATE COAL MINE By C. M. Young E. & M. J., vol. 89, p. 1159. $9\frac{1}{2}$ columns. I

Kentucky

ECONOMIC GEOLOGY OF THE KENOVA QUADRANGLE (KENTUCKY-OHIO-WEST-VIRGINIA). By W. C. Pholen. U. S. G. S., Bull. 349. 158 pages I. 1908.

CLAY RESOURCES OF NORTHEASTERN KENTUCKY. By W. C. Pholen. U. S. G. S., Bull. 285, p. 411. 6 pages. 1905.

CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Cider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905

COAL RESOURCES OF THE KENOVA QUADRANGLE, KENTUCKY By W. C. Pholen. U. S. G. S., Bull. 285, p. 259. 10 pages. I. 1905.

THE ELKHORN COAL FIELD, KENTUCKY. By R. W. Stone U. S. G. S., Bull. 316, p. 42. 15 pages. I. 1906.

THE MIDDLESBORO COALFIELD IN KENTUCKY By J. Howard E & M. J., vol. 88, p. 314. 8 columns I.

GEOLOGY AND MINERAL RESOURCES OF THE CUMBERLAND GAP COAL FIELD, KENTUCKY. By G. H. Ashley and L. C. Glenn. U. S. G. S., Professional Paper 49. 239 pages. I. 1906.

COAL RESOURCES OF THE RUSSELL FORK BASIN (KENTUCKY-VIRGINIA). By R. W. Stone. U. S. G. S., Bull. 348. 127 pages. I. 1908.

THE MIDDLESBORO COAL FIELD, KENTUCKY. By J. Howard. E. & M. J., vol. 85, p. 166. 10 columns. I.

MINING COAL IN BIG STONE GAP FIELD, KENTUCKY. By J. P. Shippen. E. & M. J., vol. 85, p. 1287. 11 columns. I.

KENTUCKY FLUORSPAR AND ITS VALUE TO THE IRON AND STEEL INDUSTRIES. By E. J. Fohs T. A. I. M. E., vol 40, p 261. 13 pages

OOOLITIC LIMESTONE AT BOWLING GREEN AND OTHER PLACES IN KENTUCKY. By J. H. Gardner. U. S. G. S., Bull. 430, p. 373 7 pages. 1909.

PERIDOTITE OF ELLIOTT COUNTY, KENTUCKY. By J. S. Diller U. S. G. S., Bull 38 31 pages. I. 1887.

See also MISCELLANEOUS PRODUCTION.

Louisiana

OIL AND GAS IN LOUISIANA, WITH A BRIEF SUMMARY OF THEIR OCCURRENCE IN ADJACENT STATES. By G. D. Harris. U. S. G. S., Bull. 429. 192 pages. I. 1910.

Maine

CLAYS OF THE PENOBSCOT BAY REGION, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 428. 4 pages. 1905.

FELDSPAR AND QUARTZ DEPOSITS OF MAINE. By E. S. Bastin. U. S. G. S., Bull. 315, p 383. 10½ pages. 1906

GRAPHITE IN MAINE By G. O. Smith. U. S. G. S., Bull. 285, p. 480. 4 pages. 1905.

THE LIME INDUSTRY OF KNOX COUNTY, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 393. 8 pages. I. 1905.

SOME MOLYBDENUM DEPOSITS OF MAINE, UTAH, AND CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 340, p. 231. 10 pages. 1907.

PEAT DEPOSITS OF MAINE. By E. S. Bastin and C. A. Davis. U. S. G. S., Bull. 376. 127 pages. I. 1909.

NOTE ON A VARIETY OF MAINE SLATE. By T. N. Dale. U. S. G. S., Bull. 285, p 449. 1½ pages. 1905.

Maryland

GAZETTEER OF MARYLAND. By H. Gannett. U. S. G. S., Bull 231. 84 pages. 1904

See also MISCELLANEOUS PRODUCTION.

Massachusetts

A GEOGRAPHIC DICTIONARY OF MASSACHUSETTS. By H. Gannett. U. S. G. S., Bull. 116 126 pages. 1894.

CLAYS OF CAPE COD, MASSACHUSETTS. By M. L. Fuller. U. S. G. S., Bull 285 p. 432. 9½ pages 1905.

BRICK CLAYS NEAR CLINTON, MASSACHUSETTS. By W. C. Alden. U. S. G. S., Bull. 430, p. 402. 3 pages. 1909.

THE WILLISTON LEAD AND COPPER MINE, NORTHAMPTON DISTRICT, MASSACHUSETTS. By C. S. Richardson. Min. Mag., vol. 2, p. 395, 2 pages; p. 634, 2 pages.

CHIEF COMMERCIAL GRANITES OF MASSACHUSETTS, NEW HAMPSHIRE AND RHODE ISLAND. By T. N. Dale. U. S. G. S., Bull 354. 228 pages. I. 1908.

GEOLOGY OF ROAD-BUILDING STONES OF MASSACHUSETTS, WITH SOME CONSIDERATION OF SIMILAR MATERIALS FROM OTHER PARTS OF THE UNITED STATES. By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 277-341. 1894-95. I.

Mexico

MEXICO, PROGRESS IN 1907. By C. A. Bohn. Min. & Sci. Press, vol. 96, p. 43. 8 columns. I.

MINERAL RESOURCES OF THE STATE OF GUERRERO, MEXICO. By W. Nevin. E. & M. J., vol. 90, p. 672. 9 columns. I.

MORE ABOUT MEXICO. By T. F. Van Wagenen. Min. Mag., vol. 4, p. 43. 8 columns. I.

SUMMER TRAVEL IN MEXICO By J. A. MacDonald. Min. & Sci. Press, vol. 101, p. 340. 8 columns.

- CHANGING CONDITIONS IN MEXICO** By H. A. McGraw. E & M. J., vol. 88, p. 657. 4½ columns.
- IMPORTANT STATES OF CENTRAL AND SOUTHERN MEXICO** By H. A. Horsfall. E & M. J., vol. 88, p. 665. 4 columns I. Map.
- GENERAL CONDITIONS IN MEXICO.** By T. F. Van Wagenen. Min. Mag., London, vol. 3, p. 440. 12 columns I.
- ON HORSEBACK IN WESTERN CHIHUAHUA** By M. R. Lamb. E & M. J., vol. 86, p. 159. 17½ columns. I.
- PRESENT CONDITION OF MINING IN MEXICO.** By F. W. Smith. E. & M. J., vol. 86, p. 655. 4 columns.
- MINING IN MEXICO, PAST AND PRESENT.** By E. A. H. Tays. E. & M. J., vol. 86, p. 665. 8 columns. I.
- LOOKING FOR MINES IN MEXICO.** By W. A. Prichard. Min. Mag., London, vol. 1, p. 205. 13½ columns. I.
- COAL MINES OF MEXICO** By M. Schwarz. M. & M., vol. 29, p. 33. 3 columns. I.
- THE COAL INDUSTRY IN MEXICO.** By E. Ludlow. E. & M. J., vol. 88, p. 10. ½ column. I.
- COAL IN COAHUILA, MEXICO.** By E. Ordoñez. Min. & Sci. Press, vol. 96, p. 363. 3½ columns. Map.
- THE CARBONIFEROUS DEPOSITS OF NORTHERN COAHUILA.** By J. G. Aguilera. E. & M. J., vol. 88, p. 730. 9½ columns.
- COAL AND IRON EXPLORATIONS IN OAXACA, MEXICO.** By J. L. W. Birkinbine. E. & M. J., vol. 90, p. 668. 10½ columns. I.
- GEOLOGY OF THE OAXACA COAL AND IRON DEPOSITS.** E. & M. J., vol. 90, p. 668. 10 columns. I.
- THE CANANEA CONSOLIDATED COPPER COMPANY IN 1908.** By L. D. Ricketts. E. & M. J., vol. 87, p. 701. 13 columns.
- REVIVAL IN URES, HERMOSILLO AND SAHUARIPA DISTRICTS, SONORA** By W. L. Wilson. E. & M. J., vol. 90, p. 661. 3 columns.
- SAN ANTONIO COPPER DISTRICT, SONORA, MEXICO.** E. & M. J., vol. 90, p. 1301. 3½ columns. D.
- ORE DEPOSITS OF CANANEA MINING DISTRICT, MEXICO.** By S. F. Emmons. E. & M. J., vol. 90, p. 402. 5 columns. Map.
- LAS PILARES MINE, NACOZARI, MEXICO.** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 887. 6½ columns. I.
- ORE DEPOSITS OF THE NACOZARI DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 658. 1½ columns.
- NACOZARI MINING DISTRICT, SONORA, MEXICO** By B. E. Russell. E. & M. J., vol. 86, p. 657. 16 columns. I.
- THE MAGISTRAL COPPER DISTRICT, MEXICO.** By P. A. Babb. E. & M. J., vol. 88, p. 1215. 4½ columns. I.
- COPPER-GOLD SMELTING AT MAGISTRAL.** By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE ARTEAGA MINING DISTRICT, CHIHUAHUA, MEXICO.** E. & M. J., vol. 89, p. 618. 3 columns. I.
- ARTEAGA DISTRICT, CHIHUAHUA, MEXICO.** By W. B. Winston. Min. & Sci. Press, vol. 98, p. 829. 3½ columns. I.
- THE CALABACILLAS MINE, CHIHUAHUA.** By R. T. Sill. E. & M. J., vol. 90, p. 359. 1½ columns. I.
- MINING OPERATIONS IN THE STATE OF CHIHUAHUA, MEXICO.** By W. H. Seamon. E. & M. J., vol. 90, p. 654. 6½ columns.
- THE ARTEAGA DISTRICT, CHIHUAHUA.** By L. T. Pockman. E. & M. J., vol. 90, p. 656. 3½ columns. I.
- YOQUIVU MINE AND MILL, WESTERN CHIHUAHUA.** By W. H. Seamon. E. & M. J., vol. 90, p. 811. 4 columns. I.
- PACHUCA DISTRICT, MEXICO.** By J. L. Mennell. Min. & Sci. Press, vol. 100, p. 455. 3 columns. I.

- SANTA GERTRUDE'S AND LA BLANCA MINES, PACHUCA, MEXICO. E & M J, vol 88, p 670. 1 column. I.
- THE SANTA GERTRUDE'S MINE, PACHUCA, MEXICO. E. & M. J., vol 89, p. 214. 9 columns. I.
- SOME FEATURES OF MINING AT PACHUCA, MEXICO. E & M J., vol 86, p. 1051. 4½ columns.
- SAN RAFAEL Y ANEXAS MINING COMPANY, PACHUCA, MEXICO. By E. Girault. E. & M. J., vol. 90, p. 643. 9 columns. I.
- LAS PILARES MINE, SONORA, MEXICO. By E M Robb. M. & M., vol 31, p. 106. 11½ columns. I.
- OCCURRENCE OF GOLD AND SILVER ORES AT THE LAS PILARES MINE. M. & M., vol. 106. 2½ columns. I.
- MINAS PEDRAZZINI OPERATIONS NEAR ARIZPE, SONORA, MEXICO. By E L Dufourcq. E. & M. J., vol. 90, p. 1105. 5½ columns.
- MINING IN OAXACA. By E. M. Lawton. Min. & Sci. Press, vol. 99, p. 232. 3½ columns. I.
- IRON EXPLORATION IN OAXACA, MEXICO. E. & M. J., vol. 90, p. 668. 10 columns. I.
- THE ESPERANZA MINE, EL ORO, MEXICO. By W E. Hindry. Min. Mag., London, vol. 1, p. 131. 10½ columns. I.
- ORE OF THE ESPERANZA MINE, MEXICO. Min. & Sci. Press, vol. 99, p. 847. 2½ columns.
- MINING IN THE ALAMOS AND ARTEAGA DISTRICTS. By G. M. Bloomer. E & M J., vol. 87, p. 699. 6 columns. I.
- ALAMOS-PROMONTOS DISTRICT, MEXICO. By T. P. Brinegar. Min. & Sci. Press, vol. 100, p. 553. 3 columns. I.
- MINING AND SMELTING AT ACHOTLA MINE, GUERRERO, MEXICO. By W. B. Devereux, Jr. E. & M J, vol. 90, p. 663.
- EL RAYO GOLD MINE, NEAR SANTA BARBARA, MEXICO. By C. T. Rice. E & M J., vol 86, p. 78. 7 columns. I.
- SAN JOSÉ DE GRACIA, A GREAT MEXICAN GOLD CAMP. By E. A. H. Tays. E & M J., vol 88, p 640. 16 columns. I.
- MINING IN THE SETENTRION, MEXICO. By M R. Lamb. Min & Sci. Press, vol. 97, p 782. 5 columns. I.
- THE LLUVIA DE ORO MINE. By E. A. H. Tays. Min & Sci. Press, vol 100, p. 59. 3 columns. I.
- CHICO, MEXICO. Min. & Sci. Press, vol 101, p. 473. 4 columns.
- TOPOGRAPHICAL AND OTHER NOTES ON THE CHOIX-GUADALUPE Y CALVO MINING DISTRICT, MEXICO. By A. W. Warwick. Min & Sci. Press, vol 95, p. 686. 6 columns. I.
- MINES OF ZOMELAHUACAN, VERACRUZ, MEXICO. By M. Fishback. E & M J, vol. 90, p. 1017. 6½ columns. I.
- CONDITIONS AT THE PALMILLA MINE, PARRAL, MEXICO. By F. W. Smith. E & M J., vol. 90, p. 259. 11½ columns. I.
- HINDS CONSOLIDATED MINES, MEXICO. By S F Shaw. Min. & Sci. Press, vol 97, p. 598. 3 columns. I.
- CALABACILLAS GOLD MINE, MEXICO. By C W. Geddes. Min & Sci Press, vol 98, p. 689. 2½ columns. I.
- THE GRANADENA MINES, MEXICO. By S. F. Shaw. Min & Sci. Press, vol 97, p. 396. 5½ columns. I.
- JALISCO AND COHINA, MEXICO. By W. A. Scott. Min. & Sci. Press, vol 98, p. 254. 3 columns. I.
- THE MINES OF NORTHWESTERN ALTAR, SONORA, MEXICO. By G W. Maynard. E & M. J., vol. 86, p. 71. 5½ columns. I.
- THE ALTAR GOLD PLACER FIELDS OF SONORA, MEXICO. E. & M. J., vol. 90, p 651. 6½ columns. I.
- DRY PLACERS IN NORTHERN SONORA, MEXICO. By F. J. H. Merrill. Min. & Sci. Press, vol. 97, p. 360. 2½ columns. I.

- MINING CEMENT GRAVEL AT ALTAR, MEXICO.** By A. Coll. M. & M., vol. 31, p. 229. 4 columns. I.
- THE GRAPHITE MINES OF SANTA MARIA, MEXICO.** By J. C. Mills. M. & M., vol. 29, p. 98. 2½ columns. I.
- IRON RESOURCES OF THE REPUBLIC OF MEXICO.** By E. Ordonez. E. & M. J., vol. 90, p. 665. 6½ columns.
- EXPLORATION OF CERTAIN IRON-ORE AND COAL DEPOSITS IN THE STATE OF OAXACA, MEXICO.** By J. L. W. Birkinbine. T. A. I. M. E., vol. 41, p. 166. 23 pages. I.
- THE CABRILLAS LEAD MINES OF COAHUILA, MEXICO.** By S. J. Lewis. E. & M. J., vol. 89, p. 1071. 8 columns. I.
- THE GRANADENA MINES, MEXICO.** By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- MINING AND TRANSPORTATION AT SANTA EULALIA.** By C. T. Rice. E. & M. J., vol. 86, p. 33. 9½ columns. I.
- ORES AND MINES OF SANTA EULALIA, MEXICO.** By C. T. Rice. E. & M. J., vol. 85, p. 1233. 9 columns. I.
- THE ORE DEPOSITS OF SANTA EULALIA, MEXICO.** By C. T. Rice. E. & M. J., vol. 85, p. 1229. 10 columns. I.
- THE CUCHILLO PARADO DISTRICT.** By R. H. Butrows. Min. & Sci. Press, vol. 95, p. 408. 1½ columns. I.
- GENESIS AND CLASSIFICATION OF MEXICAN ONYX.** By E. M. Lawton. Min. & Sci. Press, vol. 100, p. 791. 1½ columns.
- MEXICAN OILFIELDS.** E. & M. J., vol. 87, p. 1233. 1 column.
- OIL DEVELOPMENTS IN MEXICO.** E. & M. J., vol. 88, p. 660. 1½ columns.
- THE OIL FIELDS OF MEXICO.** By H. S. Denny. Min. Mag., London, vol. 3, p. 36. 8 columns. Map.
- OIL IN MEXICO.** By J. L. Mennell. Min. Mag., London, vol. 2, p. 448. 5 columns. Maps.
- OIL IN MEXICO.** By A. R. Skertchly. Min. Mag., London, vol. 3, p. 283. 6 columns. I.
- OIL IN THE STATE OF VERA CRUZ, MEXICO.** By E. Ordonez. Min. & Sci. Press, vol. 95, p. 247. 3½ columns. I.
- DULCES NOMBRES QUICKSILVER DEPOSITS, MEXICO.** By P. A. Babb. E. & M. J., vol. 88, p. 684. 7½ columns. I.
- THE SALINE DEPOSITS OF CARMEN ISLANDS.** By E. H. Cook. E. & M. J., vol. 85, p. 545. 3½ columns. I.
- THE SILVER MINES OF MEXICO.** By A. F. J. Bordeaux. T. A. I. M. E., vol. 39, p. 357. 11½ pages.
- THE MINERAL RESOURCES OF SONORA.** By F. J. H. Merrill. Min. & Sci. Press, vol. 96, p. 33. 14 columns. I. Map.
- SAN JAVIER, AN OLD SILVER DISTRICT OF SONORA.** By C. N. Nelson. E. & M. J., vol. 90, p. 660. 4 columns. Map.
- LAS CHISPAS MINES, SONORA, MEXICO.** By B. E. Russell. E. & M. J., vol. 86, p. 1006. 6 columns. I.
- EL TIGRE MINE, MONTEZUMA DISTRICT, SONORA, MEXICO.** By R. L. Herrick. M. & M., vol. 29, p. 433. 10 columns. I.
- ORES OF THE EL TIGRE MINE, SONORA, MEXICO.** M. & M., vol. 29, p. 436. ¼ column.
- THE PROMONTORIO SILVER-MINE, DURANGO, MEXICO.** By F. C. Lincoln. T. A. I. M. E., vol. 38, p. 734. 16 pages. I.
- REMINISCENCES OF MINING IN DURANGO.** By W. D. Beverly. E. & M. J., vol. 88, p. 635. 14 columns. I.
- A TRIP THROUGH NORTHERN DURANGO.** By C. N. Nelson. E. & M. J., vol. 87, p. 697. 4½ columns. I.

- OLD MINING CAMP OF PAZOS, GUANAJUATO, MEXICO. By H. A. McGraw. E. & M. J., vol. 89, p. 961. 6½ columns I.
- LORETO MINE AND THE PINGUICO DISTRICT, GUANAJUATO, MEXICO. By C. W. Botsford E. & M. J., vol. 88, p. 650. 2½ columns. I
- THE ZACATECAS DISTRICT AND ITS RELATION TO GUANAJUATO AND OTHER CAMPS. By C. W. Botsford. E. & M. J., vol. 87, p. 1227. 4 columns I.
- NOTES ON GUANAJUATO. By T. A. Rickard Min. & Sci. Press, vol. 95, p. 83 2½ columns. I.
- OPERATIONS OF GUANAJUATO DEVELOPMENT COMPANY. E. & M. J., vol. 88, p. 651. 10 columns. I
- THE WORKING MINES OF GUANAJUATO. By C. T. Rice E. & M. J., vol. 86, p. 806. 8 columns. I.
- HISTORY OF LA LUZ CAMP, GUANAJUATO, MEXICO. E. & M. J., vol. 88, p. 646. ¾ column.
- THE GUANAJUATO MINING DISTRICT, MEXICO. E. & M. J., vol. 90, p. 1310. 6 columns. I.
- GUANAJUATO, THE GREAT SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 669. 9½ columns. I.
- MINES OF AJUCHITLAN, QUERÉTARO, MEXICO. By S. J. Lewis. Min. & Sci. Press, vol. 100, p. 211. 8½ columns. I.
- THE MINES OF EL DOCTOR, MEXICO. By T. D. Murphy. Min. & Sci. Press, vol. 95, p. 241. 8½ columns I.
- THE SILVER-LEAD MINES OF SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 464. 12 columns. I.
- ORE OF THE SANTA BARBARA DISTRICT, MEXICO. E. & M. J., vol. 86, p. 208. 2 columns.
- LOS LAMENTOS MINE, CHIHUAHUA. E. & M. J., vol. 87, p. 489. 1 column.
- RECENT MINING DEVELOPMENTS IN CHIHUAHUA. By A. P. Rogers E. & M. J., vol. 88, p. 681. 6½ columns. I.
- STORIES OF THE BATOPILAS MINES, CHIHUAHUA, MEXICO. By M. R. Lamb. E. & M. J., vol. 85, p. 689. 4½ columns I.
- SANTA BARBARA MINE, CHIHUAHUA, MEXICO. M. & M., vol. 29, p. 369. 3 columns. I.
- NATIVE SILVER IN SOUTHWESTERN CHIHUAHUA, MEXICO. By W. M. Brodie. E. & M. J., vol. 89, p. 664. 5½ columns. I
- TRAVELING IN WESTERN CHIHUAHUA, MEXICO. By F. H. Morley. E. & M. J., vol. 87, p. 706. 8½ columns.
- MINING IN NORTHERN SINALOA, MEXICO. By E. A. H. Tays. Min. & Sci. Press, vol. 99, p. 120. 3½ columns. Map.
- THE ANTIGUA OF REAL DE SIVIRIOJA, SINALOA. By E. A. H. Tays. E. & M. J., vol. 90, p. 1155. 5½ columns I.
- THE SILVER-MINES OF MEXICO: Discussion of Paper of A. F. J. Bordeaux, vol. 39, p. 357.
T. A. I. M. E., vol. 40, p. 848. 5 pages.
- THE ZACUALPAN DISTRICT, MEXICO, By J. M. Platt. E. & M. J., vol. 88, p. 670. 4 columns. I.
- THE SILVER MINE OF "JESUS MARIA," IN NEW LEON, MEXICO. Min. Mag., vol. 1, p. 34. 14 pages; p. 570. 11½ pages.
- MINES OF PEÑOLES COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 309. 13½ columns. I.
- PACHUCA AND REAL DEL MONTE SILVER DISTRICT, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 519. 17 columns. I.
- SOME REMINISCENCES OF OLD DOLORES, MEXICO. By V. Pender. E. & M. J., vol. 89, p. 1329. 6 columns.

DIENTE, MEXICO. By E. McCormick. Min & Sci. Press, vol. 95, p. 648. 1 column

ZACATECAS, A FAMOUS SILVER CAMP OF MEXICO. By C. T. Rice E & M. J., vol. 86, p. 401. 15½ columns. I.

SULPHUR MINING IN MEXICO By E. F. White M & M., vol. 30, p. 75. 3½ columns. I.

THE SULPHUR DEPOSITS OF MAPIMI, MEXICO. By J. D. Villarello T. I. M. E., vol. 37, p. 676. 2 pages.

ZINC MINING IN CHIHUAHUA, MEXICO. By W. H. Seamon E & M. J., vol. 90, p. 679. 1½ columns.

DEL CARMEN ZINC MINE, MEXICO. M. & M., vol. 31, p. 437. 4½ columns. I.

BOQUILLAS ZINC DEPOSITS, MEXICO By C. Moser M & M., vol. 31, p. 479. 1½ columns I

Michigan

PORTLAND CEMENT IN MICHIGAN By L. L. Kimball. U. S. G. S., Mineral Resources, 1903.

COPPER-BEARING ROCKS OF LAKE SUPERIOR By R. D. Irving. U. S. G. S., 3d Ann Rept., pp. 89-188 1881-82. I.

THE COPPER-BEARING ROCKS OF LAKE SUPERIOR. By R. D. Irving. U. S. G. S., Monograph V, 464 pages. I. 1883.

THE LAKE SUPERIOR COPPER MINES. By J. A. Callender. Min. Mag., vol. 2, p. 249. 3 pages.

NOTES FROM THE LAKE SUPERIOR IRON RANGES. By D. E. Woodbridge. E. & M. J., vol. 89, p. 863. 3½ columns.

THE GOGEBIC RANGE T. L. S. M. I., vol. 15, p. 10 16 pages.

THE MARQUETTE IRON RANGE. By G. A. Newett. T. L. S. M. I., vol. 14, p. 19. 12 pages. Map.

DEVELOPMENT IN THE MARQUETTE RANGE IRON ORE MINES. M. & M., vol. 30, p. 195. 6 columns. I.

THE SILVER OF THE LAKE SUPERIOR MINERAL REGION. Min. Mag., vol. 1, p. 447. 8 pages; p. 612. ¼ page.

Minnesota

IRON MINING IN MINNESOTA. By E. K. Soper Min & Sci Press, vol. 101, p. 767. 5½ columns. I.

IRON MINING AT COLERAINE, MINNESOTA By A. H. Fay. E & M. J., vol. 88, p. 770. 3 columns I.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF MINNEAPOLIS, MINNESOTA. By E. F. Burchard. U. S. G. S., Bull. 430, p. 280 12 pages. 1909.

Mississippi

GEOLOGY AND MINERAL RESOURCES OF MISSISSIPPI By A. F. Crider. U. S. G. S., Bull., 283, 99 pages I. 1906.

Missouri

COALFIELDS OF IOWA AND MISSOURI. By H. Hinds. M & M., vol. 31, p. 80. 4½ columns I Map

THE GEOLOGY, MINING AND PREPARATION OF BARITE IN WASHINGTON COUNTY, MISSOURI. By A. A. Steel. T. A. I. M. E., vol. 40, p. 711. 32½ pages. I.

THE ORE-DEPOSITS OF THE JOPLIN REGION, MISSOURI By F. L. Clerc. T. A. I. M. E., vol. 38, p. 320. 23 pages.

LEAD MINING IN THE JOPLIN DISTRICT By L. L. Wittich M. & M. vol. 30, p. 743. 4½ columns. I.

OPERATIONS OF THE DOC RUN LEAD COMPANY. By A. H. Fay. E. & M. J., vol. 89, p. 610. 9 columns. I.

OZARK LEAD- AND ZINC-DEPOSITS: Their Genesis, Localization, and Migration. By C. R. Keyes. T. A. I. M. E., vol. 40, p. 184. 47½ pages. I.; p. 856. 5½ pages.

LEAD AND ZINC ORES IN MISSOURI. By J. R. Finlay. E. & M. J., vol. 86, p. 605. 15½ columns. I.

- ZINC AND LEAD DEPOSITS OF SOUTHWESTERN MISSOURI** By F. L. Garrison. Min & Sci. Press, vol. 96, p. 291 7 columns, I.; p. 325, 7½ columns. I
- JOPLIN DISTRICT ZINC AND LEAD ORES.** M. & M., vol. 31, p. 327. 3 columns.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** By L. L. Wittich. M. & M., vol. 31, p. 31. 1½ columns.
- THE MINING OF OXIDIZED ZINC ORES.** By L. L. Wittich. M. & M., vol. 30, p. 276. 2 columns. I.
- MIGRATIONS OF THE JOPLIN ZINC BELT.** By C. R. Keyes. E & M. J., vol. 87, p. 1049 2½ columns. I.
- TRIPOLI DEPOSITS NEAR SENECA, MISSOURI** By C. E. Siebenthal and R. D. Mesler. U. S. G. S., Bull. 340, p. 429. 10 pages I. 1907
- See also MISCELLANEOUS PRODUCTION.
- Montana**
- NOTES ON THE MINERAL DEPOSITS OF THE BEARPAW MOUNTAINS, MONTANA** By L. J. Pepperberg. U. S. G. S., Bull. 430, p. 135. 12 pages. I. 1909
- MINERAL RESOURCES OF THE BIGHORN MOUNTAIN REGION.** By W. H. Darton. U. S. G. S., Bull. 285, p. 303. 8 pages. 1905.
- MINERAL RESOURCES OF THE BIGHORN BASIN.** By C. A. Fisher. U. S. G. S., Bull. 285, p. 311. 4½ pages. 1905.
- CEMENT MATERIAL NEAR HAVRE, MONTANA** By L. J. Pepperberg. U. S. G. S., Bull. 380, p. 327. 10 pages 1908.
- CLAYS IN THE KOOTENAI FORMATION NEAR BELT, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 340, p. 417. 7 pages. 1907.
- THE COAL INDUSTRY OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 85, p. 1055. 12 columns. I.
- THE COAL MINING INDUSTRY OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 87, p. 845. 16½ columns I.
- THE GREAT FALLS COAL FIELD, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 316, p. 161. 14 pages. I. 1906.
- THE GREAT FALLS COALFIELD IN MONTANA.** By A. T. Shurick. E. & M. J., vol. 87, p. 587. 10½ columns. I.
- THE GREAT FALLS COAL FIELD OF MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 356. 87 pages. I. 1909.
- DEVELOPMENT OF THE BEAR CREEK COAL FIELDS, MONTANA.** By C. A. Fisher. U. S. G. S., Bull. 285, p. 269 2 pages. 1905.
- COAL NEAR THE CRAZY MOUNTAINS, MONTANA** By R. W. Stone. U. S. G. S., Bull. 341, p. 78. 14 pages. I. 1907.
- THE BULL MOUNTAIN COAL FIELD, MONTANA.** By L. H. Woolsey. U. S. G. S., Bull. 341, p. 62. 16 pages. I. 1907.
- THE MILES CITY COAL FIELD, MONTANA.** By A. J. Collier and C. D. Smith. U. S. G. S., Bull. 341, p. 36. 26 pages. I. 1907.
- THE COAL FIELDS OF PART OF DAWSON, ROSEBUD AND CUSTER COUNTIES, MONTANA.** By A. G. Leonard. U. S. G. S., Bull. 316, p. 194. 18 pages. I. 1906.
- COALS OF CARBON COUNTY, MONTANA.** By N. H. Darton. U. S. G. S., Bull. 316, p. 174 20 pages. I. 1906.
- THE LEWISTON COAL FIELD, MONTANA.** By W. R. Calvert. U. S. G. S., Bull. 341, p. 108 15 pages. I. 1907.
- THE LEWISTON COAL FIELD, MONTANA.** By W. R. Calvert. U. S. G. S., Bull. 390. 83 pages. I. 1909
- THE MILK RIVER COAL FIELD, MONTANA.** By L. J. Pepperberg. U. S. G. S., Bull. 381, p. 82. 26 pages. I. 1908.

- THE CENTRAL PART OF THE BALL MOUNTAIN COAL FIELD, MONTANA.** By R. W. Richards. U. S. G. S., Bull. 381, p. 60. 22 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA.** By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- THE RED LODGE COAL FIELD, MONTANA.** By E. G. Woodruff. U. S. G. S., Bull. 341, p. 92. 16 pages. I. 1907.
- NOTES ON THE COALS OF THE CUSTER NATIONAL FOREST, MONTANA.** By C. H. Wegemann. U. S. G. S., Bull. 381, p. 108. 7 pages. I. 1908.
- RECENT DEVELOPMENTS NEAR HELENA, MONTANA.** E. & M. J., vol. 90, p. 354. 1½ columns. Map.
- RADERSBURG DISTRICT, MONTANA.** Min. & Sci. Press, vol. 101, p. 170. 3 columns. D.
- NOTES ON THE GEOLOGY OF THE RADERSBURG DISTRICT, MONTANA.** By D. C. Bard. E. & M. J., vol. 90, p. 599. 1 column.
- GOLD DEPOSITS OF THE LITTLE ROCKY MOUNTAINS, MONTANA.** By W. H. Emmons. U. S. G. S., Bull. 340, p. 96. 20½ pages. I. 1907.
- THE GRANITE-BIMETALLIC AND CABLE MINES, PHILIPSBURG QUADRANGLE, MONTANA.** By W. H. Emmons. U. S. G. S., Bull. 315, p. 31. 25 pages. I. 1906.
- MINES OF MISSOULA COUNTY, MONTANA.** By J. P. Rowe. M. & M., vol. 31, p. 581. 6½ columns. I.
- JUDITH BASIN, MONTANA.** Min. & Sci. Press, vol. 101, p. 398. 4½ columns. I.
- GYPSEUM DEPOSITS OF MONTANA.** By J. P. Rowe. E. & M. J., vol. 85, p. 1243. 3 columns. I.
- THE NORTH DAKOTA-MONTANA LIGNITE AREA.** By A. G. Leonard. U. S. G. S., Bull. 285, p. 316. 14 pages. 1905.
- THE SENTINEL BUTTE LIGNITE FIELD, NORTH DAKOTA AND MONTANA.** By A. G. Leonard and C. D. Smith. U. S. G. S., Bull. 341, p. 15. 21 pages. I. 1907.
- THE FORT PECK INDIAN RESERVATION LIGNITE FIELD, MONTANA.** By C. D. Smith. U. S. G. S., Bull. 381, p. 40. 20 pages. I. 1908.
- MONTANA SAPPHIRES.** M. & M., vol. 29, p. 199. ½ column.
- SAPPHIRE IN MONTANA.** Min. & Sci. Press, vol. 95, p. 433. ½ column.
- THE CORBIN DISTRICT, JEFFERSON COUNTY, MONTANA.** By F. Bushnell. E. & M. J., vol. 89, p. 1154. 5½ columns. I.
- ZINC MINING IN BUTTE, MONTANA.** E. & M. J., vol. 87, p. 912. 1 column.

Nebraska

- CEMENT MATERIALS IN REPUBLICAN VALLEY, NEBRASKA.** By N. H. Darton. U. S. G. S., Bull. 430, p. 381. 8 pages. I. 1909.

Nevada

- CENTRAL NEVADA.** By A. H. Elftman. Min. & Sci. Press, vol. 96, p. 398. 2 columns. Map.
- MINING AT HAMILTON, NEVADA.** By W. S. Larsh. M. & M., vol. 29, p. 521. 5 columns. I.
- AN OCCURRENCE OF ASPHALITE IN NORTHEASTERN NEVADA.** By R. Anderson. U. S. G. S., Bull. 380, p. 233. 2½ pages. 1908.
- FOOTHILL COPPER BELT OF THE SIERRA NEVADA.** By J. A. Reid. Min. & Sci. Press, vol. 96, p. 388. 9½ columns. I.
- THE YERINGTON COPPER DEPOSITS.** By F. L. Ransome. M. & M., vol. 30, p. 88. 6 columns. I.
- THE YERINGTON DISTRICT, NEVADA.** By C. S. Durand. M. & M., vol. 31, p. 24. 2½ columns. I.

- THE YERINGTON COPPER DISTRICT, NEVADA. By J. A. Carpenter. Min. & Sci. Press, vol. 101, p. 4. 10½ columns. I
- YERINGTON COPPER DISTRICT. By F. L. Ransome. Min. & Sci. Press, vol. 100, p. 354. 4½ columns. Map
- CONDITIONS IN THE YERINGTON COPPER DISTRICT, NEVADA. By J. Tyssowski. E. & M. J., vol. 89, p. 764. 6½ columns. I.
- THE YERINGTON COPPER DISTRICT, NEVADA. By F. L. Ransome. U. S. G. S., Bull. 380, p. 99, 21 pages. I. 1908.
- SECONDARY COPPER ORES OF THE LUDWIG MINE, YERINGTON, NEVADA. By J. P. Jennings. J. C. M. I., vol. 11, p. 463. 3½ pages.
- RAY CONSOLIDATED MINES, NEVADA. By R. L. Herrick. M. & M., vol. 29, p. 544. 6½ columns. I.
- COPPER MINING AT ELY, NEVADA. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 58. 6 columns. I.
- PRESENT CONDITIONS OF ELY. Min. & Sci. Press, vol. 100, p. 866. 5½ columns. I.
- GEOLOGICAL AND PHYSICAL CONDITIONS OF TONOPAH MINES. By W. P. Jenney. Min. & Sci. Press, vol. 99, p. 685. 3 columns. I.
- THE MINES AND MILLS OF TONOPAH, NEVADA. By G. E. Wolcott. E. & M. J., vol. 87, p. 594. 7 columns. I.
- THE GOLDFIELD TYPE OF ORE OCCURRENCE. By R. T. Hill. E. & M. J., vol. 86, p. 1096. 11½ columns. I.
- GOLDFIELD, NEVADA. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 559, 6½ columns, I.; p. 664, 5 columns; p. 738, 6½ columns, I.; p. 774, 6½ columns, I.; p. 840, 8 columns, I.; vol. 97, p. 20, 4½ columns, I.; p. 50, 7½ columns. I.
- GOLDFIELD AND THE GOLDFIELD DISTRICT OF NEVADA. By J. Tyssowski. E. & M. J., vol. 87, p. 1229. 6 columns. I.
- RAWHIDE, NEVADA. By A. Del Mar. E. & M. J., vol. 85, p. 853. 6 columns. I.
- RAWHIDE, NEVADA. By W. F. Boericke. E. & M. J., vol. 85, p. 565. 1 column.
- NOTES ON RAWHIDE, NEVADA. Min. & Sci. Press, vol. 96, p. 424. 3½ columns.
- ORE FORMATION IN THE WONDER DISTRICT, NEVADA. By E. A. Ritter. E. & M. J., vol. 87, p. 290. 7 columns. I.
- MONTGOMERY-SHOSEHONE MINE. By A. H. Martin. Min. & Sci. Press, vol. 100, p. 289. 3 columns. I.
- KIMBERLY, NEVADA. By J. A. Carpenter. Min. & Sci. Press, vol. 100, p. 482. 3 columns. I.
- MINING AND MILLING AT RAWHIDE, NEVADA. By G. E. Wolcott. E. & M. J., vol. 87, p. 345. 11 columns. I.
- THE SEVEN TROUGHS MINING DISTRICT. By W. M. Hauck. E. & M. J., vol. 85, p. 644. 4 columns. I.
- SEVEN TROUGHS DISTRICT OF NEVADA. By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 790. 6½ columns.
- MANHATTAN, NEVADA. E. & M. J., vol. 86, p. 1002. 3½ columns. I.
- NOTES ON THE MANHATTAN PLACERS, NYE COUNTY, NEVADA. By C. C. Jones. E. & M. J., vol. 88, p. 101. 8 columns. I.
- MINES AND PLANTS OF THE PITTSBURG SILVER PEAK. By H. Hanson. Min. & Sci. Press, vol. 98, p. 657. 9½ columns. I.
- CAMP ALUNITE, A NEW NEVADA GOLD DISTRICT. By R. T. Hill. E. & M. J., vol. 86, p. 1203. 11 columns. I.
- REMINISCENCES OF GOLDFIELD, NEVADA. By M. R. Lamb. E. & M. J., vol. 87, p. 441. 5 columns.
- BANNOCK, NEVADA. By C. S. Thomas. Min. & Sci. Press, vol. 99, p. 820. 1 column. I.

- ROUND MOUNTAIN, NEVADA. By F. L. Ransome. Min & Sci. Press, vol. 99, p. 568. 2½ columns. I.
- ROUND MOUNTAIN, NEVADA. By F. L. Ransome. U S G S., Bull. 380, p. 44. 4 pages. I. 1908.
- ROUND MOUNTAIN, NEVADA. By G. A. Packard. Min & Sci. Press, vol. 96, p. 807. 4½ columns. I.
- NATIONAL, NEVADA. By H. C. Cutler. Min & Sci. Press, vol. 101, p. 606. 3½ columns. I.
- SOME BULLFROG MINES. By W. H. Spaulding. E. & M. J., vol. 85, p. 159. 5 columns.
- NOTES ON OPERATIONS IN JARBRIDGE CAMP, NEVADA. By W. W. Fisk. E. & M. J., vol. 90, p. 763. 5½ columns. Map.
- REPORT ON MINING GEOLOGY OF EUREKA DISTRICT, NEVADA. By J. S. Curtis. U S G. S., 4th Ann. Rept, pp. 221-251. 1882-83. I.
- JARBRIDGE, NEVADA. By W. A. Scott. Min. & Sci. Press, vol. 100, p. 613. 4½ columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder. U. S. G. S., Bull. 430, p. 240. 6 pages. I. 1909.
- WHITEPINE IRON-ORE DEPOSITS. By E. C. Harder. Min & Sci. Press, vol. 100, p. 387. 3 columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder. Min. & Sci. Press, vol. 101, p. 212. 2 columns. Map.
- AMARILLA IRON AND PHOSPHATE DEPOSITS, NEVADA. By O. H. Hershey. Min. & Sci. Press, vol. 97, p. 535. 3½ columns.
- THE YELLOWPINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- NICKEL ORE IN NEVADA. E. & M. J., vol. 86, p. 23. ¾ column.
- NICKEL-COPPER-PLATINUM ORE IN NEVADA. By A. M. Thompson. E. & M. J., vol. 86, p. 72. ½ column.
- OIL PROSPECTS IN NEVADA. Min. & Sci. Press, vol. 97, p. 817. 2 columns.
- TWO AREAS OF OIL PROSPECTING IN LYON COUNTY, WESTERN NEVADA. By R. Anderson. U S G S., Bull. 381, p. 490. 3 pages. 1908.
- ALLEGED OIL PROSPECTS IN NEVADA. M & M., vol. 29, p. 335. 1½ columns.
- GEOLOGY AND OIL PROSPECTS OF THE RENO REGION, NEVADA. By R. Anderson. U S. G. S., Bull 381, p. 475. 15 pages. 1908.
- PLATINUM IN SOUTHEASTERN NEVADA. By H. C. Bancroft. Min. & Sci. Press, vol. 100, p. 797. ½ column.
- QUICKSILVER IN NEVADA. By W. C. Davis. Min. & Sci. Press, vol. 99, p. 663. ¾ column. I.
- THE SILVER-LEAD DEPOSITS OF EUREKA, NEVADA. E & M. J., vol. 85, p. 123. 3 columns.
- THE COMSTOCK MINES TODAY. By W. Symmes. Min. & Sci. Press, vol. 99, p. 24. 4½ columns. I.
- PROGRESS ON THE COMSTOCK LODE. By R. L. Herrick. M. & M., vol. 29, p. 150. 10½ columns. I.
- THE GREAT COMSTOCK LODE. By G. McM. Ross. Min & Sci. Press, vol. 95, p. 468. 4 columns.
- GEOLOGY AND MINERAL RESOURCES OF THE OSCEOLA MINING DISTRICT, WHITE PINE COUNTY, NEVADA. By F. B. Weeks. U S G S., Bull. 340, p. 117. 18 pages. I. 1907.
- THE YELLOWPINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M J, vol. 90, p. 1308. 5½ columns.
- NOTES ON THE PIOCHE MINING DISTRICT, NEVADA. By S. F. Shaw. E. & M J., vol. 88, p. 545. 10½ columns. I.
- PIOCHE, NEVADA. By J. W. Abbott. Min. & Sci. Press, vol. 95, p. 176. 4 columns. I.

HORNSILVER DISTRICT, NEVADA By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 433. 2 columns.

THE HORNSILVER DISTRICT, NEVADA. By F. L. Ransome. U. S. G. S., Bull 380, p. 41. 3 pages. 1908.

THE BRISTOL MINES, NEVADA. By S. L. Goodale. M. & M., vol. 30, p. 507. 4 columns. I.

TUNGSTEN DEPOSITS IN THE SNAKE RANGE, WHITE PINE COUNTY, EASTERN NEVADA By F. B. Weeks. U. S. G. S., Bull 340, p. 263. 7 pages. I. 1907.

ZINC MINING AT YELLOW PINE, NEVADA. By N. B. Gregory. M. & M., vol. 31, p. 340. 2½ columns. I.

Newfoundland

THE MINERAL RESOURCES OF NEWFOUNDLAND. By B. Symons. E. & M. J., vol. 90, p. 360. 10 columns. Map.

New Hampshire

SUPPLEMENTARY NOTES ON THE GRANITES OF NEW HAMPSHIRE. By T. N. Dale. U. S. G. S., Bull. 430, p. 346. 26 pages. 1909.

SOME ORE DEPOSITS OF MAINE AND THE MILAN MINE, NEW HAMPSHIRE. By W. H. Emmons. U. S. G. S., Bull. 432, 62 pages. I.

THE SHELburne LEAD MINING COMPANY, NEW HAMPSHIRE. By J. T. Hodge. Min. Mag., vol. 1, p. 27. 7½ pages, I.; vol. 3, p. 481. 10 pages.

PYRITE MINING IN NEW HAMPSHIRE. By A. H. Fay. E. & M. J., vol. 88, p. 463. 2 columns. I.

New Hebrides

MINERAL POSSIBILITIES OF THE NEW HEBRIDES ISLANDS. By G. M. Colvocoresses. E. & M. J., vol. 87, p. 957. 3 columns.

THE COPPER LODES OF NEW CALEDONIA. By E. A. Weinberg. T. Au. I. M. E., vol. 7, p. 138. 12 pages. I.

SULPHUR IN THE NEW HEBRIDES ISLANDS. E. & M. J., vol. 87, p. 958. ½ column.

New Jersey

A GEOGRAPHIC DICTIONARY OF NEW JERSEY. By H. Gannett. U. S. G. S., Bull. 118. 131 pages. 1894. I.

COPPER MINING IN NEW JERSEY. By H. B. Kummel. E. & M. J., vol. 87, p. 808. 2 columns.

IRON ORE IN NEW JERSEY. By H. W. Kummel. E. & M. J., vol. 85, p. 1193. 2 columns.

IRON ORE OF NEW JERSEY: Geological Occurrence, Properties and Metallurgy By W. Kitchell. Min. Mag. vol. 8, p. 332. 16 pages; p. 434, 4 pages.

THE WHITE LIMESTONE AREA OF FRANKLIN, SUSSEX COUNTY, NEW JERSEY. By J. E. Wolff and A. H. Brooks. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 425-458. 1896-97. I.

THE MARLS OF NEW JERSEY. By G. H. Cook. Min. Mag., vol. 5, p. 132. 14 pages.

New Mexico

THE COAL MINES OF DAWSON, NEW MEXICO. By J. E. Sheridan. M. & M., vol. 31, p. 653. 9½ columns. I.

THE ENGLE COAL FIELD, NEW MEXICO. By W. T. Lee. U. S. G. S., Bull. 285, p. 240. 1 page. 1905.

THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.

A RECONNAISSANCE SURVEY OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO By M. K. Shaler. U. S. G. S., Bull. 316, p. 376. 50 pages. I. 1906.

- THE COAL-MINES AND PLANT OF THE STAG CAÑON FUEL CO., DAWSON, NEW MEXICO. By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- THE UNA DELL GATO COAL FIELD, SANDOVAL COUNTY, NEW MEXICO. By M. R. Campbell. U. S. G. S., Bull. 316, p. 427. 4 pages. I. 1906.
- COAL IN THE VICINITY OF FORT STANTON RESERVATION, LINCOLN COUNTY, NEW MEXICO. By M. R. Campbell. U. S. G. S., Bull. 316, p. 431. 4 pages. I. 1906.
- THE COAL FIELD BETWEEN GALLINA AND RATON SPRINGS, NEW MEXICO, IN THE SAN JUAN COAL REGION. By J. H. Gardner. U. S. G. S., Bull. 341, p. 335. 17 pages. I. 1907.
- THE COAL FIELD BETWEEN DURANGO, COLORADO, AND MONERO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE COAL FIELD BETWEEN GALLUP AND SAN MATEO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 364. 15 pages. I. 1907.
- ISOLATED COAL FIELD IN SANTA FE AND SAN MIGUEL COUNTIES, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 447. 5 pages. 1908.
- THE CARTRIDGE COAL FIELD, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 452. 9 pages. I. 1908.
- THE COAL FIELD BETWEEN SAN MATEO AND CUBA, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 461. 13 pages. I. 1908.
- CARBONACEOUS COAL IN NEW MEXICO. By J. H. Gardner. M. & M., vol. 30, p. 570. 2½ columns. I.
- THE RICH COALFIELDS IN NEW MEXICO. E. & M. J., vol. 86, p. 1251. 1½ columns.
- THE COAL-MINES AND PLANT OF THE STAG CAÑON FUEL CO., DAWSON, N. M. By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- BURRO MOUNTAIN MINING DISTRICT, NEW MEXICO. E. & M. J., vol. 89, p. 1121. 3 columns. I.
- BURRO MOUNTAIN MINING DISTRICT. By I. J. Stauber. M. & M., vol. 30, p. 380. 4½ columns. I.
- SYLVANITE DISTRICT, NEW MEXICO, By G. A. Martin. E. & M. J., vol. 86, p. 962. 3½ columns.
- SYLVANITE, NEW MEXICO, THE NEW GOLD CAMP. By F. A. Jones. E. & M. J., vol. 86, p. 1101. 9 columns. I.
- OCCURRENCE OF ORE AT SYLVANITE, NEW MEXICO. E. & M. J., vol. 86, p. 1102. 3 columns. I.
- THE BLACK RANGE MINING DISTRICT, NEW MEXICO. By M. Fishback. E. & M. J., vol. 89, p. 911. 4 columns. I.
- THE COCHITI MINING DISTRICT, NEW MEXICO. By P. E. Barbour. E. & M. J., vol. 86, p. 173. 6½ columns. I.
- REVIVAL OF MINING IN THE MOGOLONS, NEW MEXICO. By E. G. Spilsbury. E. & M. J., vol. 88, p. 62. 10½ columns. I.
- THE LORDSBURG MINING DISTRICT, NEW MEXICO. By E. D. Fry. E. & M. J., vol. 90, p. 820. 1 column.
- MINES OF THE LORDSBURG DISTRICT, NEW MEXICO. By J. L. Wells. E. & M. J., vol. 87, p. 890. 2½ columns.
- THE MANZANO GROUP OF THE RIO GRANDE VALLEY, NEW MEXICO. By W. T. Lee and G. H. Girty. U. S. G. S., Bull. 309. 141 pages. I. 1909.
- NEW MEXICO GOLD GRAVELS. By J. A. Carruth. M. & M., vol. 31, p. 117. 5 columns. I.
- GYPSUM IN NORTHWESTERN NEW MEXICO. By M. K. Shaler. U. S.

- G. S., Bull. 315, p. 260. 5 pages. I. 1906.
- THE HANOVER IRON-ORE DEPOSITS, NEW MEXICO. By S. Paige. U. S. G. S. Bull. 380, p. 199. 16 pages I. 1908.
- HANOVER IRON-ORE DEPOSITS, NEW MEXICO. By S. Paige. Min. & Sci. Press, vol. 100, p. 285. 3½ columns. I.
- THE TRES HERMANAS MINING DISTRICT, NEW MEXICO. By W. Lindgren. U. S. G. S., Bull. 380, p. 123. 5 pages 1908.
- TRES HERMANAS MINING DISTRICT, NEW MEXICO. By W. Lindgren. Min. & Sci. Press, vol. 100, p. 491. 2 columns
- LUNA COUNTY, NEW MEXICO. By E. McCormick. Min. & Sci. Press, vol. 98, p. 328 1½ columns
- MEERSCHAUM IN NEW MEXICO By D. B. Sterrett. U. S. G. S., Bull. 340, p. 466. 6 pages. 1907.
- GENESIS OF THE LAKE VALLEY, NEW MEXICO, SILVER DEPOSITS. By C. R. Keyes. T. A. I. M. E., vol. 39, p. 139. 30½ pages. I.
- TURQUOISE MINING, BURRO MOUNTAINS, NEW MEXICO. By E. R. Zahnski. E. & M. J., vol. 86, p. 843. 10 columns. I.
- land. T. A. I. M. E., vol. 40, p. 165 19½ pages. I.
- THE MAGNETITE BELTS OF PUTNAM COUNTY, NEW YORK. By C. A. Stewart. Sch. Mines Quart., vol. 29, p. 283. 12 pages. I.
- THE IRON DEPOSITS OF NEW YORK STATE. By J. D. Whitney. Min. Mag., vol. 7, p. 255. 3½ pages.
- THE SLATE BELT OF EASTERN, NEW YORK AND WESTERN VERMONT. By T. N. Dale. U. S. G. S., 19th Ann. Rept., pt. 3, pp. 153-307. 1897-98. I.
- MINERAL PRODUCTION OF NEW YORK. By D. H. Newland. E. & M. J., vol. 85, p. 1007. 3½ columns.
- THE MINERAL PRODUCTION OF NEW YORK IN 1908. By D. H. Newland E. & M. J., vol. 87, p. 1273. 4½ columns.

New Zealand

- MINING IN NEW ZEALAND. Min. & Sci. Press, vol. 96, p. 233. 2 columns. I.
- THE BLACKWATER MINES AT WAINTA, NEW ZEALAND. By S. Fry E. & M. J., vol. 89, p. 726. 4 columns I.
- GOLD AND SILVER MINING IN NEW ZEALAND. By W. Wilson. Min. & Sci. Press, vol. 100, p. 520. 4 columns. I.
- GOLD AND SCHEELITE NEAR MACRAES, NEW ZEALAND. By P. Morgan. Min. & Sci. Press, vol. 99, p. 33. 2½ columns.
- THE GOLD-BEARING LODES OF BENDIGO AND CARBECK, NEW ZEALAND. By J. Park. Min. & Sci. Press, vol. 97, p. 121. 3½ columns. I.
- THE ORE DEPOSITS OF WAIHI, NEW ZEALAND. By A. M. Finlayson. Min. Mag., London, vol. 2, p. 281. 8½ columns. I.
- New York**
- AN ARSENIC MINE IN PUTNAM COUNTY NEW YORK. By E. K. Judd. E. & M. J., vol. 85, p. 306. 1 column.
- FELDSPAR AND QUARTZ DEPOSITS OF SOUTHEASTERN NEW YORK. By E. S. Bastin. U. S. G. S., Bull. 315, p. 394. 4 pages. 1906.
- GOLD IN THE ADIRONDACKS. E. & M. J., vol. 89, p. 620. 5 columns.
- THE FOREST OF DEAN IRON MINE, NEW YORK. By G. C. Stoltz. E. & M. J., vol. 85, p. 1091. 5½ columns. I.
- THE CLINTON IRON-ORE DEPOSITS IN NEW YORK STATE. By D. H. New-
- Nicaragua**
- MINING IN NICARAGUA. By T. L. Carter. T. A. I. M. E., vol. 41, p. 594. 37 pages. I. Map.

- NICARAGUA MINING CONDITIONS.** Min. & Sci. Press, vol. 101, p. 774. 1 column. I.
- MINING IN NICARAGUA.** By T. L. Carter. Min. Mag., London, vol. 3, p. 123. 10½ columns I.
- CENTRAL AMERICA: Nicaragua and Its Mines.** Min. Mag., vol. 6, p. 146. 6 pages.
- THE GOLD MINING INDUSTRY IN NICARAGUA.** By T. L. Carter. E. & M. J., vol. 90, p. 1204. 8½ columns. I.
- THE MINING INDUSTRY OF NICARAGUA.** By T. L. Carter. M. & M., vol. 31, p. 566. 4½ columns. I.
- PIZ-PIZ DISTRICT, NICARAGUA.** By W. A. Connelly. Min. & Sci. Press, vol. 100, p. 350. 4 columns. Map
- GOLD IN EASTERN NICARAGUA.** By C. C. Semple. Min. & Sci. Press, vol. 99, p. 221. 6½ columns. I
- NOTES ON THE NICARAGUAN GOLDFIELDS.** By M. R. Walker. E. & M. J., vol. 88, p. 263. 3½ columns. I.
- Nova Scotia**
- THE AURIFEROUS ANTIMONY ORE OF WEST GORE, NOVA SCOTIA.** By D. F. Haley. E. & M. J., vol. 88, p. 723. 5½ columns.
- THE CARBONACEOUS AND BITUMINOUS MINERALS OF NEW BRUNSWICK.** By R. W. Ellis. J. C. M. I., vol. 11, p. 204. 15 pages.
- THE SHALE AND CLAY DEPOSITS OF NOVA SCOTIA AND PORTIONS OF NEW BRUNSWICK.** By H. Ries. J. C. M. I., vol. 13, p. 336. 20½ pages. I.
- THE CLAY AND SHALE DEPOSITS OF NOVA SCOTIA.** By H. Ries. J. M. Soc. N. S., vol. 15, p. 9. 18½ pages.
- COAL MINING IN PICTOU COUNTY, NOVA SCOTIA.** By H. E. Coll. E. & M. J., vol. 85, p. 1101. 7 columns. I.
- DOMINION No. 2 COLLIERY OF THE DOMINION COAL COMPANY.** By A. G. Haultain. J. C. M. I., vol. 13, p. 641. 14 pages. I.
- NOTES ON THE MINING PROPERTY OF THE SEAL HARBOUR MINING COMPANY.** By T. G. MacKenzie. J. M. Soc. N. S., vol. 12, p. 63. 19 pages.
- HOW CAN THE GOLD MINING INDUSTRY OF NOVA SCOTIA BE ASSISTED?** By E. P. Brown. J. M. Soc. N. S., vol. 13, p. 33. 13½ pages.
- SOME OF THE CAUSES OF THE PRESENT CONDITION OF GOLD MINING IN NOVA SCOTIA.** By G. W. Stuart. J. M. Soc. N. S., vol. 12, p. 85. 19½ pages.
- GOLD MEASURES OF TANGIER, NOVA SCOTIA.** By G. A. Packard. Min. & Sci. Press, vol. 95, p. 430. 4 columns. I.
- THE OLDHAM STERLING GOLD MINE, NOVA SCOTIA.** By C. V. Brennan. J. C. M. I., vol. 10, p. 426. 16 pages. I.
- A PRACTICAL SUGGESTION FOR TESTING THE GOLD MINES OF NOVA SCOTIA.** By F. P. Rounan. J. M. Soc. N. S., vol. 13, p. 27. 6 pages.
- GYPSUM ON CAPE BRETON ISLAND, NOVA SCOTIA.** By J. Tyssowski. E. & M. J., vol. 88, p. 569. 4 columns. Maps.
- NEW BRUNSWICK AND THE ACADIAN IRON MINES.** Min. Mag., vol. 6, p. 117. 8 pages.
- IRON ORES OF NOVA SCOTIA.** By P. Thompson. E. & M. J., vol. 88, p. 358. 1½ columns.
- A NEW IRON ORE FIELD IN THE PROVINCE OF NEW BRUNSWICK.** By J. E. Hardman. J. C. M. I., vol. 11, p. 156. 9 pages
- THE DISCOVERY OF IRON ORE IN THE NEW BRUNSWICK PROVINCE.** J. C. M. I., vol. 11, p. 159. 6 pages.
- STRUCTURE OF THE TUNGSTEN DEPOSITS OF MOOSE RIVER, NOVA SCOTIA.** By E. R. Fairbault. J. M. Soc. N. S., vol. 15, p. 59. 6 pages.

Ohio

THE BEREA GRIT OIL SAND IN THE CADIZ QUADRANGLE, OHIO. By W. T. Griswold. U. S. G. S., Bull. 198. 43 pages. I 1902.

THE BEREA OIL SAND IN FLUSEING QUADRANGLE, OHIO. By W. T. Griswold. U. S. G. S., Bull. 346. 30 pages. I 1908

Oklahoma (Indian Territory)

A GAZETTEER OF INDIAN TERRITORY (OKLAHOMA). By H. Gannett. U. S. G. S., Bull. 248. 70 pages. 1905.

GEOLOGY OF THE MCALESTER COAL FIELD, INDIAN TERRITORY. By J. A. Taff. U. S. G. S., 19th Ann. Rept., pt. 3, pp 423-600. 1897-98. I.

GEOLOGY OF EASTERN CHOCTOW COAL FIELD, INDIAN TERRITORY. By J. A. Taff and G. I. Adams. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 257-311 1899-1900. I.

THE OKLAHOMA COAL FIELDS. By C. N. Gould. M. & M., vol. 29, p. 275. 2½ columns. I.

COAL MINING IN OKLAHOMA. By W. P. Thomas. M. & M., vol. 31, p. 193. 5 columns. I. and Map.

WICHITA MOUNTAINS, OKLAHOMA. By G. W. Kneisly. Min. & Sci. Press, vol. 97, p. 873. 1 column. Map

REPORT ON ORE DEPOSITS OF THE WICHITA MOUNTAINS, OKLAHOMA. By H. F. Bain. U. S. G. S., Professional Paper 31. 97 pages. I. 1904.

GRAHAMITE DEPOSITS OF SOUTHEASTERN OKLAHOMA. By J. A. Taff. U. S. G. S., Bull. 380, p. 286. 12 pages. I. 1908.

OKLAHOMA GYPSUM DEPOSITS. E. & M. J., vol. 85, p. 315. ¼ column.

ANALYSES OF CRUDE PETROLEUM FROM OKLAHOMA AND KANSAS. By D. T. Day. U. S. G. S., Bull. 381, p. 494. 10 pages. 1908.

THE MADILL OIL POOL, OKLAHOMA. By J. A. Taff and W. J. Reed. U. S. G. S., Bull. 381, p. 504. 12 pages. I. 1908

MINERAL RESOURCES OF NORTHEASTERN OKLAHOMA. By C. E. Sieben-thal. U. S. G. S., Bull. 340, p. 187. 42 pages. I. 1907

OKLAHOMA'S NEW ZINC-LEAD DISTRICT. E. & M. J., vol. 87, p. 496. 2½ columns.

MIAMI LEAD AND ZINC DISTRICT IN OKLAHOMA. By O. Ruhl. E. & M. J., vol. 86, p. 910. 8 columns. I.

Oregon

MINERAL RESOURCES OF THE GRANTS PASS QUADRANGLE AND BORDERING DISTRICTS, OREGON. By J. S. Diller and G. F. Kay. U. S. G. S., Bull. 380, p. 48. 32 pages. I. 1908.

A COAL PROSPECT ON WILLOW CREEK, MORROW COUNTY, OREGON. By W. C. Mendenhall. U. S. G. S., Bull. 341, p. 406. 3 pages. 1907.

THE ROGUE RIVER VALLEY COAL FIELD, OREGON. By J. S. Diller. U. S. G. S., Bull. 341, p. 401. 5 pages. I. 1907.

CRACKER CREEK DISTRICT, OREGON. By J. T. Pardee. Min. & Sci. Press, vol. 100, p. 585. 3½ columns. I.

FAULTING AND VEIN STRUCTURE IN THE CRACKER CREEK GOLD DISTRICT, BAKER COUNTY, OREGON. By J. T. Pardee. U. S. G. S., Bull. 380, p. 85. 8 pages. I. 1908.

THE NORTH POLE MINE, BAKER COUNTY, OREGON. By E. Melzer. E. & M. J., vol. 89, p. 868. 4½ columns. I.

GOLD MINES IN EASTERN OREGON. Min. & Sci. Press, vol. 101, p. 141. 2½ columns. I.

RYE VALLEY GOLD MINES, OREGON. By A. Mathez. Min. & Sci. Press, vol. 99, p. 687. 1½ columns. I.

- MINES OF THE RIDDLES QUADRANGLE, OREGON.** By J. S. Diller and G. F. Kay. U. S. G. S., Bull. 340, p. 134. 19 pages. I. 1907
- NOTES ON THE BOHEMIA MINING DISTRICT, OREGON.** By D. F. MacDonald. U. S. G. S., Bull. 380, p. 80. 5 pages. 1908.
- PLACER GRAVELS OF THE SUMPTER AND GRANITE DISTRICTS, EASTERN OREGON.** By J. T. Pardee. U. S. G. S., Bull. 430, p. 59. 7 pages. I. 1909.
- PLACERS OF WALDO, SOUTH OREGON** By J. M. Nicol. Min. & Sci. Press, vol. 99, p. 122. 2½ columns. I.
- NICKEL DEPOSITS OF NICKEL MOUNTAIN, OREGON.** By G. F. Kay. U. S. G. S., Bull. 315, p. 120. 8 pages. 1906.
- THE MALHEUR OIL FIELDS OF OREGON.** E. & M. J., vol. 88, p. 512. ¼ column.
- PLATINUM AT THE CRACKER JACK MINE, DOUGLAS COUNTY, OREGON.** By H. B. Pulsifer. E. & M. J., vol. 86, p. 1003. 2½ columns.
- STRUCTURAL MATERIALS IN PARTS OF OREGON AND WASHINGTON** By N. H. Darton. U. S. G. S., Bull. 387. 36 pages. I. 1909.
- A TIN DEPOSIT NEAR SPOKANE.** By A. R. Whitman. Min. & Sci. Press, vol. 95, p. 49. 1½ columns. I.
- Panama**
- MINING IN PANAMA.** By S. Turner. Min. & Sci. Press, vol. 96, p. 130. 5½ columns. I.
- Pennsylvania**
- ECONOMIC GEOLOGY OF THE AMITY QUADRANGLE IN EASTERN WASHINGTON COUNTY, PENNSYLVANIA** By F. G. Clapp. U. S. G. S., Bull. 300. 145 pages. I. 1907.
- ECONOMIC GEOLOGY OF THE BEAVER QUADRANGLE, PENNSYLVANIA.** By L. H. Woolsey. U. S. G. S., Bull. 286. 132 pages. I. 1906.
- MINERAL RESOURCES OF THE KITTANNING AND RURAL VALLEY QUADRANGLES, PENNSYLVANIA.** By C. Butts. U. S. G. S., Bull. 279. 198 pages. I. 1906.
- MINERAL RESOURCES OF THE ELDERS RIDGE QUADRANGLE, PENNSYLVANIA** By R. W. Stone. U. S. G. S., Bull. 256. 86 pages. I. 1905.
- NOTES ON CLAYS AND SHALES IN CENTRAL PENNSYLVANIA.** By G. H. Ashley. U. S. G. S., Bull. 285, p. 442. 2 pages. 1905.
- WHITE CLAYS OF SOUTH MOUNTAIN, PENNSYLVANIA.** By G. W. Stose. U. S. G. S., Bull. 315, p. 322. 12½ pages. I. 1906.
- CLAYS AND SHALES OF SOUTHWESTERN CAMBRIA COUNTY, PENNSYLVANIA** By W. C. Phalen and L. Martin. U. S. G. S., Bull. 315, p. 344. 10 pages. 1906.
- CLAYS AND SHALES OF CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA.** By E. F. Lines. U. S. G. S., Bull. 315, p. 335. 8 pages. 1906
- A GENERAL VIEW OF THE ANTHRACITE COAL REGION OF PENNSYLVANIA** By H. W. Poole. Min. Mag., vol. 4, p. 245. 4 pages.
- THE LACKAWANA COAL BASIN: Its Geology and Mining Resources Around Scranton, Pennsylvania.** By H. D. Rodgers. Min. Mag., vol. 2, p. 388, 6 pages; p. 475; 15 pages, I; p. 609, 12 pages
- PROPERTY OF THE SHORT MOUNTAIN COAL COMPANY, LYKENS VALLEY, PENNSYLVANIA** Min. Mag., vol. 1, p. 468. 7½ pages.
- THE SOUTHERN ANTHRACITE COAL-FIELD** By J. H. Haertter. E. & M. J., vol. 85, p. 653. 9 columns. I.
- ANTHRACITE COAL MINING.** By H. C. Chance. U. S. G. S., Mineral Resources. 1883 and 1884, vol. 14.
- COAL MINING IN SOUTHERN ANTHRACITE FIELD.** By T. F. Dowling.

- E & M. J., vol 86, p. 475 10 columns. I.
- MOREA COLLIERY BASIN, NORTH-EASTERN PENNSYLVANIA M & M vol. 30, p. 730 1½ columns I.
- THE TUNUNGWANT COAL FIELD OF MCKEAN COUNTY, PENNSYLVANIA By D D Owen Min Mag, vol. 9, p 244, 12 pages; p. 306, 10 pages.
- THE LYCOMING IRON AND COAL COMPANY, PENNSYLVANIA. Min. Mag., vol 1, p 455 13½ pages.
- THE COAL LANDS OF THE CLINTON COUNTY COAL COMPANY, PENNSYLVANIA Min. Mag, vol 3, p 513. 5½ pages
- SMITHING COAL OF PENNSYLVANIA. Second Geol. Rept Pa G, p. 202. 10 pages.
- THE SAGMORE BITUMINOUS COAL MINES, CLEARFIELD DISTRICT, PENNSYLVANIA. By E. K. Judd. E & M. J., vol. 85, p. 605. 6 columns. I.
- A TYPICAL RIVER MINE IN PENNSYLVANIA. By F. W. Parsons. E. & M. J., vol. 89, p. 326. 18 columns. I.
- DONOHUE COKE COMPANY, NEAR GREENSBURG, PENNSYLVANIA By C. R. King M & M, vol. 29, p. 445. 7½ columns. I
- BUFFALO-SUSQUEHANNA SAGAMORE MINE By R. D. N. Hall M. & M., vol. 31, p. 645. 8½ columns I.
- THE JENNER MINE OF THE SOMERSET COAL COMPANY, PENNSYLVANIA. By J. L. Wagner. M. & M., vol. 29, p. 323 2½ columns. I.
- COAL RESOURCES OF JOHNSTOWN, PENNSYLVANIA, AND VICINITY By W. C. Phalen. U. S. G. S., Bull 316, p. 20. 22 pages. I. 1906.
- COALS OF THE CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA. By E. F. Lines U. S. G. S., Bull. 316, p 13. 9 pages. I. 1906.
- THE PUNKSUTAWNEY AND GLEN CAMPBELL COAL FIELDS OF INDIANA AND JEFFERSON COUNTIES, PENNSYLVANIA. By F B Peck and G H. Ashley U S G. S., Bull 285, p. 276. 4 pages. 1905.
- CLEARFIELD COAL FIELD, PENNSYLVANIA. By G H Ashley. U. S. G. S., Bull. 285, p. 271. 5 pages. I. 1905
- THE MARIANNA COAL MINES. By H. M. Phelps. M & M, vol 31, p. 523. 7½ columns. I
- THE COPPER DEPOSITS OF SOUTH MOUNTAIN IN SOUTHERN PENNSYLVANIA. By G. W Stose U. S. G. S., Bull. 430, p. 122 10 pages. I. 1909.
- GANISTER IN BLAIR COUNTY, PENNSYLVANIA By C. Butte. U. S. G. S, Bull. 380, p. 337. 5 pages 1908.
- GRAVEL AND SAND IN THE PITTSBURG DISTRICT, PENNSYLVANIA. By E. W Shaw. U. S. G. S., Bull. 430, p 388. 12 pages. I. 1909.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN PENNSYLVANIA. By A. C. Spencer. U. S. G S, Bull. 359, 102 pages. I. 1908
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN BERKS AND LEBANON COUNTIES, PENNSYLVANIA. By A. C. Spencer. U S. G. S., Bull 315, p 185. 4½ pages. 1906.
- THE JAUSS IRON MINE, DILLSBURG, PENNSYLVANIA. By A C. Spencer. U. S. G. S, Bull. 430, p. 247. 3 pages. 1909.
- THE CLINTON IRON-ORE DEPOSITS IN THE STONE VALLEY, HUNTINGDON COUNTY, PENNSYLVANIA By J. J. Rutledge. T A I M. E., vol 40, p. 134. 30 pages. I
- DEPOSITS OF BROWN IRON ORE NEAR DILLSBURG, YORK COUNTY, PENNSYLVANIA By E. C. Harder. U. S. G. S., Bull. 430, p. 250. 5½ pages. 1909.
- THE MINERAL-PAINT ORES OF LEHIGH GAP, PENNSYLVANIA. By E. C. Eckel. U. S. G. S., Bull. 315, p. 435. 3 pages. 1906.

- PAINT-ORE DEPOSITS NEAR LEHIGH GAP, PENNSYLVANIA.** By F. T. Agthe and J. L. Dynan. U. S. G. S., Bull. 430, p. 440. 14 pages. I. 1909.
- OTHER DEPOSITS OF EASTERN PENNSYLVANIA.** By J. C. Stoddard and A. C. Callen. U. S. G. S., Bull. 430, p. 424. 15 pages. I. 1909.
- LIMESTONES OF SOUTHWESTERN PENNSYLVANIA.** By F. G. Clapp. U. S. G. S., Bull. 249. 52 pages. I. 1905.
- THE NINEVEH AND GORDON OIL SANDS IN WESTERN GREENE COUNTY, PENNSYLVANIA.** By F. G. Clapp. U. S. G. S., Bull. 285, p. 362. 4½ pages. 1905.
- PHOSPHOROUS ORE AT MOUNT HOLLY SPRINGS, PENNSYLVANIA.** By G. W. Store. U. S. G. S., Bull. 315, p. 474. 9 pages. 1906.
- Peru**
- PROGRESS IN PERU.** By L. W. Strauss. Min. Mag., vol. 4, p. 216. 4 columns. Map.
- THE PHYSICAL FEATURES AND MINING INDUSTRY OF PERU.** By G. T. Adams. T. A. I. M. E., vol. 39, p. 250. 10 pages. I.
- THE MINING DISTRICTS OF CENTRAL PERU.** By J. C. Pickering. E. & M. J., vol. 85, p. 997. 14½ columns. I.
- THE PHYSICAL FEATURES AND MINING INDUSTRY OF PERU.** By G. T. Adams. T. A. I. M. E., vol. 39, p. 250. 10 pages. I.
- BIBLIOGRAPHY OF LITERATURE ON MINING IN PERU.** T. A. I. M. E., vol. 39, p. 258. 2 pages.
- THE COAL DEPOSITS OF PERU.** By Z. C. B. Borlkjof. E. & M. J., vol. 88, p. 983. 1½ columns.
- BEDDED GOLD QUARTZ VEINS NEAR POTO, PERU.** By E. C. Thurston. E. & M. J., vol. 90, p. 597. 3½ columns. I.
- PERUVIAN PLACER MINES.** Min. & Sci. Press, vol. 101, p. 741. ½ column.
- SAN ANTONIO DE POTO HYDRAULIC MINE, PERU.** By W. E. G. Firebrace. Min. & Sci. Press, vol. 97, p. 780. 4 columns. I.
- ANDEAN PLACERS, PERU AND BOLIVIA.** Min. & Sci. Press, vol. 99, p. 61. 1 column.
- QUICKSILVER AT HUANCAYETICA, PERU.** By L. W. Strauss. Min. & Sci. Press, vol. 99, p. 561. 11½ columns. I.
- THE CERRO DE PASCO MINING DISTRICT, PERU.** By C. C. Sample. E. & M. J., vol. 85, p. 155. 11 columns. I.
- NITRATE OF SODA: Its Abundance in South Peru.** Min. Mag., vol. 3, p. 499. 7 pages.
- VANADIUM IN PERU.** By S. Jochamowitz. E. & M. J., vol. 87, p. 996. ½ column.
- VANADIUM DEPOSITS IN PERU.** By D. F. Hewett. Min. & Sci. Press, vol. 98, p. 619. 5½ columns.
- VANADIUM-DEPOSITS IN PERU.** By D. F. Hewett. T. A. I. M. E., vol. 40, p. 274. 25½ pages. I.; Discussion, p. 361, 2½ pages.
- Philippine Islands**
- METALLIC MINERAL RESOURCES OF THE PHILIPPINES.** By M. Goodman. E. & M. J., vol. 86, p. 706. 3½ columns.
- PHILIPPINE COAL MINES.** Min. & Sci. Press, vol. 100, p. 323. 2 columns.
- MINING COAL IN THE PHILIPPINE ISLANDS.** By R. Hawkhurst. E. & M. J., vol. 88, p. 879. 4 columns.
- PHILIPPINE COALS.** By A. J. Cox. E. & M. J., vol. 86, p. 1058. 4 columns.
- PHILIPPINE COAL FIELDS.** By J. B. Dilworth. T. A. I. M. E., vol. 39, p. 653. 11 pages. I.

COPPER IN THE PHILIPPINES. By W. D. Smith. E. & M. J., vol. 89, p. 30. 1 column.

THE PHILIPPINE GOLD MINES By M. Woolley M. & M., vol. 31, p. 464. 4 columns. I

GOLD IN THE PHILIPPINES. By H. G. Ferguson. E. & M. J., vol. 88, p. 1165. 5 columns. I.

ARORAY DISTRICT, MASBATE, PHILIPPINE ISLANDS. Min. & Sci. Press, vol. 100, p. 388. 3 columns.

PARACALE AND MAMBULAO DISTRICTS. By W. D. Smith. Min. & Sci. Press, vol. 100, p. 453. 4 columns.

PETROLEUM AND NATURAL GAS IN THE PHILIPPINES By W. D. Smith. E. & M. J., vol. 88, p. 1285. 1½ columns

PHOSPHATE DEPOSITS IN THE PHILIPPINES U. S. G. S. 21st Ann. Rept., pt. 3. 644 pages. 1899-1900. I.

Portugal

PORTUGUESE MINING NOTES. By C. L. Major. E. & M. J., vol. 88, p. 322. 1½ columns. I.

Rhode Island

A GEOGRAPHIC DICTIONARY OF RHODE ISLAND. By H. Gannett. U. S. G. S., Bull. 115. 31 pages. 1894.

THE COAL FIELDS OF BRISTOL COUNTY AND OF RHODE ISLAND. By E. Hitchcock. Min. Mag., vol. 1, p. 582. 10 pages.

Russia

SIBERIAN IMPRESSIONS. By H. G. Nichols. Min. Mag., vol. 4, p. 132. 9 columns. I.

NATIVE METHODS IN SIBERIA. By F. L. Lowell. Min. & Sci. Press, vol. 101, p. 600. 4½ columns. I.

MINING IN SIBERIA. E. & M. J., vol. 88, p. 172. 2½ columns.

THE BOGOSLOOSK MINING ESTATE. By W. H. Shockley. T. A. I. M. E., vol. 39, p. 274. 29 pages. I.

THE BOGOSLOOSK MINING ESTATE. Discussion of the paper of W. H. Shockley, p. 274. T. A. I. M. E., vol. 39, p. 897. 1½ pages.

COAL MINING ON THE KIRGHESE STEPPE, IN THE AKMOLINSK DISTRICT OF SOUTH-WESTERN SIBERIA By E. Watson. T. A. I. M. E., vol. 37, p. 124. 10 pages. I.

THE ATBASAR COPPER DISTRICT By W. Pellew-Harvey. Min. Mag., London, vol. 2, p. 59. 8 columns. I.

NOTES ON THE ZANGEZOUR COPPER MINES. By A. L. Simon. T. A. I. M. & M., vol. 18, p. 413. 12 pages.

RUSSIAN FAR EASTERN GOLD FIELD. M. & M., vol. 31, p. 447. 2 columns.

GOLD MINING IN SIBERIA. Min. & Sci. Press, vol. 20, p. 394. 1½ columns.

GOLD AND OTHER MINERALS OF EASTERN SIBERIA. By S. F. G. White. E. & M. J., vol. 87, p. 1034. 4½ columns.

MINING IN SIBERIA. By C. W. Purington. Min. & Sci. Press, vol. 98, p. 251. 3 columns.

KOLCHAN PLACER OF THE ORSK GOLD-FIELDS, LTD By C. W. Purington. E. & M. J., vol. 90, p. 1202. 5½ columns

MANGANESE MINING IN THE CAUCASUS. By A. Muls. Min. Mag., London, vol. 2, p. 439. 4 columns. I.

RUSSIAN PLATINUM AND FOREIGN COMPANIES IN RUSSIA. By V. X. Prardinsky. E. & M. J., vol. 89, p. 1025. 5½ columns.

RUSSIAN PLATINUM DEVELOPMENTS. M. & M., vol. 30, p. 400. 2 columns.

RECENT PROGRESS AT MAIKOP: A RUSSIAN OIL FIELD. By T. J. Hoover. Min. Mag., vol. 4, p. 298. 3 columns. I.

PROBLEMS OF THE RUSSIAN OIL INDUSTRY. By F. Richards. E. & M. J., vol. 88, p. 69. 4 columns.

RUSSIAN PETROLEUM. M. & M., vol. 30, p. 655. 3 columns.

OILFIELDS OF SAKHALIN. By C. E. Pfaaffs. Min. Mag., London, vol. 3, p. 447. 2 columns

MAIKOP OIL-FIELD By A. B. Thompson Min. Mag., London, vol. 2, p. 277. 7½ columns. I.

THE SALT MINING INDUSTRY IN THE RUSSIAN EMPIRE By F. Thiess. T. I. M. E., vol. 37, p. 702. 1½ pages

THE TYNTICHA ZINC MINE, SIBERIA. By C. W. Purington. Min. & Sci. Press, vol. 99, p. 200. 1½ columns

Spain

CINNABAR IN SPAIN Min. Mag., vol. 7, p. 150. 4½ pages.

THE RIO TINTO COPPER DISTRICT. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 165. 14 pages. I.

PRODUCTION OF IRON ORE IN SPAIN. By H. A. McBride. M. & M., vol. 31, p. 577. 6½ columns. I.

Sweden

THE GEOLOGICAL RELATIONS OF THE SCANDINAVIAN IRON-ORE. By H. Sjogren. T. A. I. M. E., vol. 38, p. 766. 69 pages I.

MINING COAL IN SPITZBERGEN, NORWAY. By T. Collot. E. & M. J., vol. 88, p. 1274. 2 columns. I.

Tasmania

TIN DEPOSITS OF TASMANIA M. & M., vol. 31, p. 309. 4 columns. I.

NOTES ON THE ZEEHAN MINING FIELD, TASMANIA. By S. W. Williams E. & M. J., vol. 89, p. 713. 7½ columns. I.

TIN MINING IN TASMANIA. By J. B. Lewis E. & M. J., vol. 85, p. 485. 12½ columns. I.

MOUNT BISCHOFF OF TASMANIA. By F. H. Bathurst. Min. Mag., London, vol. 3, p. 195. 10 columns. I.

GRAVEL MINING IN TASMANIA Min. Mag., London, vol. 3, p. 383. 1½ columns. I.

AN EXTENSIVE IRON FORMATION, WEST COAST OF TASMANIA. By D. Jones. T. Au. I. M. E., vol. 5, p. 117. 6 pages.

Tennessee

CEMENT RESOURCES OF THE CUMBERLAND GAP DISTRICT, TENNESSEE-VIRGINIA. By E. C. Eckel U. S. G. S., Bull. 285, p. 374. 2½ pages. 1905.

CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.

THE CLAYS OF TENNESSEE. By G. H. Ashley. Min. & Sci. Press, vol. 101, p. 712. 1½ columns.

THE WIND ROCK COAL MINE, TENNESSEE By W. S. Hutchinson. M. & M., vol. 31, p. 1. 6 columns. I.

COAL IN TENNESSEE. Min. Mag., vol. 8, p. 450. 10 pages.

THE CUMBERLAND COAL FIELDS, TENNESSEE By J. P. Listey. Min. Mag., vol. 5, p. 45. 13 pages. I.

DUCKTOWN COPPER DEPOSIT, TENNESSEE By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 182. 3½ pages.

COPPER REGION OF TENNESSEE. A Sketch of the Geology of Tennessee. By R. O. Currey. Min. Mag., vol. 8, p. 156. 7 pages.

GOLD AND SILVER IN TENNESSEE. Min. Mag., vol. 8, p. 237. 4½ pages.

TONNAGE ESTIMATES OF CLINTON IRON ORE IN THE CHATTANOOGA REGION OF TENNESSEE, GEORGIA, AND ALABAMA. By E. F. Burchard. U. S. G. S., Bull. 380, p. 169. 20 pages, 1908.

IRON OPERATIONS IN THE CHATTANOOGA DISTRICT. By E. Higgins. E. & M. J., vol. 87, p. 1. 15 columns. I.

CONDITION OF THE PHOSPHATE INDUSTRY IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 89, p. 180. 3 columns

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 153. 3½ columns. I.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 404. 2 columns.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 573. 2 columns.

PHOSPHATE ROCK IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 1150. 2½ columns.

THE EAST TENNESSEE ZINC MINING DISTRICT. By S. W. Osgood. E. & M. J., vol. 87, p. 401. 9½ columns. I.

CHARACTER OF ORE IN THE EAST TENNESSEE ZINC DISTRICT. E. & M. J., vol. 87, p. 402. ½ column.

Texas

A GAZETTEER OF TEXAS. By H. Gannett. U. S. G. S., Bull. 190, 162 pages, I, 1902; Bull. 224, 177 pages, I., 1904.

NORTHWEST BOUNDARY OF TEXAS. By M. Baker. U. S. G. S., Bull. 194. 51 pages. I. 1902

PORTLAND CEMENT MATERIALS NEAR EL PASO, TEXAS. By G. B. Richardson. U. S. G. S., Bull. 340, p. 411. 4 pages. 1907.

MINERALS OF THE RARE-EARTH METALS AT BARINGER HILL, LLANO COUNTY, TEXAS. By F. L. Hess. U. S. G. S., Bull. 340, p. 286. 8 pages. 1907.

PRELIMINARY REPORT ON PRE-CAMBRIAN GEOLOGY AND IRON ORES OF LLANO COUNTY, TEXAS. By S. Paige. U. S. G. S., Bull. 430, p. 256. 12 pages. 1909.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF AUSTIN, TEXAS. By E. F. Burchard. U. S. G. S., Bull. 430, p. 292. 24 pages. 1909.

CONDITION OF THE QUICKSILVER INDUSTRY IN TEXAS. By W. B. Phillips. E. & M. J., vol. 88, p. 1022. 8 columns.

MERCURY MINERALS FROM TERLINGUA, TEXAS. By W. F. Hillsbrand and W. T. Schaller. U. S. G. S., Bull. 405. 174 pages. I. 1909.

THE PRESIDIO-SILVER MINES, SHAFER, TEXAS. By M. P. Kirk. E. & M. J., vol. 88, p. 818. 4½ columns. I.

SHAFTER SILVER DISTRICT, PRESIDIO COUNTY, TEXAS. By W. B. Phillips. E. & M. J., vol. 90, p. 1303. 6½ columns. I.

TEXAS CELESTITE DEPOSITS. By F. L. Hess. E. & M. J., vol. 88, p. 117. 2½ columns. I.

FRANKLIN MOUNTAIN TIN PROSPECTS. By R. Chauvenet. M. & M., vol. 30, p. 529. 4½ columns.

Turkey

MINERAL RESOURCES OF THE TURKISH EMPIRE. By L. Dominian. Min. & Sci. Press, vol. 98, p. 821. 10 columns. Map.

MINERAL DEPOSITS IN TREBIZOND, TURKEY. Min. & Sci. Press, vol. 99, p. 299. 1½ columns. I.

COAL IN TURKEY. Min. & Sci. Press, vol. 98, p. 821. 3 columns.

COPPER IN TURKEY. Min. & Sci. Press, vol. 98, p. 824. 1 column.

GOLD AND SILVER IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. 1 column.

IRON IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. ½ column.

LEAD IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. 1 column.

MERCURY IN TURKEY. Min. & Sci. Press, vol. 98, p. 826. 1 column.

United States (General)

A DICTIONARY OF GEOGRAPHIC POSITIONS. By H. Gannett. U. S. G. S., Bull. 123. 183 pages. I. 1895.

- AREAS OF THE UNITED STATES, THE STATES AND THE TERRITORIES.** By H. Gannett. U. S. G. S., Bull. 302. 9 pages. I. 1906.
- DISTRIBUTION OF THE NATION'S MINERAL WEALTH** By G. O. Smith. Min. & Sci. Press, vol. 97, p. 880. 2 columns.
- THE MINES AND MINERAL RESOURCES OF AMERICA.** Min. Mag., vol. 1, p. 23, 3 pages; p. 109, 5 pages; p. 232, 2½ pages, p. 347, 2½ pages; p. 489, 5½ pages.
- THE MINERAL WEALTH OF THE CORDILLERAS.** By R. W. Raymond and W. R. Ingalls. E. & M. J., vol. 88, p. 678. 7½ columns.
- MINERAL RESOURCES OF THE UNITED STATES.** Min. & Sci. Press, vol. 96, p. 138. 2 columns.
- SOME REMARKS ON THE METALLIC WEALTH OF THE UNITED STATES, DESCRIBED AND COMPARED WITH OTHER COUNTRIES** Min. Mag., vol. 3, p. 471. 5 pages
- BORAX-DEPOSITS OF THE UNITED STATES** By C. R. Keys. T. A. I. M. E., vol. 40, p. 674. 36½ pages. I. Discussion, p. 909. 6 pages.
- See also MISCELLANEOUS DISTRICTS.
- THE COAL-FIELDS OF THE UNITED STATES.** By M. R. Campbell and E. W. Parker. T. A. I. M. E., vol. 40, p. 253. 8 pages.
- THE COALFIELDS OF THE UNITED STATES.** E. & M. J., vol. 87, p. 160. 8 columns. I.
- PACIFIC COAST COALS** Min. & Sci. Press, vol. 22, p. 216. ½ column.
- ANTHRACITE COAL ON THE PACIFIC COAST.** E. & M. J., vol. 90, p. 920. 1 column. I.
- COAL MINING IN THE MIDDLE WEST** By G. H. Cushing. Min. & Sci. Press, vol. 100, p. 130. 3½ columns.
- FUEL IN THE INTERMOUNTAIN REGION.** By D. Harrington. M. & M., vol. 29, p. 493. 4½ columns.
- THE BARREN ZONE OF THE NORTHERN APPALACHIAN COALFIELD** By I. C. White. E. & M. J., vol. 87, p. 509. 1½ columns.
- THE NORTHERN APPALACHIAN COALFIELD.** By R. N. Hosler. E. & M. J., vol. 89, p. 1122. 8½ columns.
- THE COAL-FIELDS OF THE UNITED STATES.** By M. R. Campbell and E. W. Parker. T. A. I. M. E., vol. 40, p. 253. 8 pages.
- THE PROSPECTS OF THE LAKE SUPERIOR MINING REGION.** By W. H. Stevens. Min. Mag., vol. 2, p. 149. 4 pages.
- THE COPPER VEINS OF THE SOUTH.** By O. M. Lieber. Min. Mag., vol. 7, p. 367. 4 pages.
- COPPER DEPOSITS IN THE WESTERN FOOTHILLS OF THE SIERRA NEVADA.** By W. Forstner. Min. & Sci. Press, vol. 96, p. 743. 10½ columns. I.
- SEARCH FOR DIAMONDS ON THE PACIFIC COAST.** Min. & Sci. Press, vol. 22, p. 358. 1 column.
- ECONOMIC GEOLOGY OF THE FELDSPAR DEPOSITS OF THE UNITED STATES.** By E. S. Bastin. U. S. G. S., Bull. 420. 85 pages. I. 1910
- GLASS SAND OF THE MIDDLE MISSISSIPPI BASIN.** By E. F. Burchard. U. S. G. S., Bull. 285, p. 459. 14 pages. 1905.
- RECONNAISSANCE OF SOME GOLD AND TIN DEPOSITS OF THE SOUTHERN APPALACHIANS** By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906.
- EXAMINATIONS AND EXPLORATIONS ON THE GOLD-BEARING BELTS OF THE ATLANTIC STATES.** Min. Mag., vol. 2, p. 378, 10½ pages, I.; vol. 3, p. 161, 7½ pages.
- GRANITES OF THE SOUTHEASTERN ATLANTIC STATES.** By T. L. Watson. U. S. G. S., Bull. 426. 282 pages. I.
- THE FLAKE GRAPHITE INDUSTRY IN THE UNITED STATES.** By F. D. Chester. E. & M. J., vol. 88, p. 785. 2 columns.

- IRON ORE SUPPLY OF THE UNITED STATES** By C. W. Hayes. Min. & Sci. Press, vol. 98, p. 798. 3 columns.
- IRON OCCURRENCES IN THE EASTERN HALF OF THE UNITED STATES** E. & M. J., vol. 90, p. 206 2½ columns. Map
- IRON ORES EAST OF THE MISSISSIPPI RIVER.** By J. Birkinbine U. S. G. S., Mineral Resources, 1886, vol. 8. 65 pages
- CHRONOLOGY OF LEAD-MINING IN THE UNITED STATES** By W. R. Ingalls. T. A. I. M. E., vol. 38, p. 644. 12 pages.
- THE GEOLOGY OF THE UPPER MISSISSIPPI LEAD REGION.** By J. V. Phillips. Min. Mag., vol. 2, p. 129. 9½ pages. I.
- GEOGRAPHIC DISTRIBUTION OF LEAD AND ZINC DEPOSITS OF THE MISSISSIPPI VALLEY.** By C. R. Keyes. E. & M. J., vol. 86, p. 1004. 3 columns.
- MANGANESE DEPOSITS OF THE UNITED STATES.** By E. C. Harder. U. S. G. S., Bull. 380, p. 255. 22 pages. I. 1908.
- MANGANESE DEPOSITS OF THE UNITED STATES, WITH SECTIONS ON FOREIGN DEPOSITS, CHEMISTRY AND USES.** By E. C. Harder. U. S. G. S., Bull. 427. 208 pages I.
- See also MISCELLANEOUS DISTRICTS.
- USEFUL MINERALS OF UNITED STATES.** U. S. G. S., Mineral Resources, 1882, vol. 17. 13 pages.
- USEFUL MINERALS IN UNITED STATES.** By A. Williams. U. S. G. S., Mineral Resources, 1887. 125 pages.
- MINOR MINERALS OF PACIFIC COAST.** By C. G. Yale. U. S. G. S., Mineral Resources, 1882, vol. 17. 2 pages.
- PEAT.** By H. H. Hindshaw. U. S. G. S., Mineral Resources, 1904.
- PEAT DEPOSITS.** By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 4. 9 pages.
- OIL INDUSTRY OF THE UNITED STATES** Min. & Sci Press, vol. 96, p. 202 5½ columns
- THE PETROLEUM FIELDS OF THE UNITED STATES.** By W. G. Burroughs. E & M J., vol. 89, p. 921. 11 columns I
- PHOSPHATE DEPOSITS OF UNITED STATES.** By F. B. Van Horn. Min. & Sci Press, vol. 99, p. 88. 5 columns.
- PHOSPHATE DEPOSITS IN WESTERN UNITED STATES.** By F. B. Weeks and W. F. Ferrier. U. S. G. S., Bull. 315, p. 449. 14 pages. I. 1906.
- PHOSPHATE DEPOSITS IN THE WESTERN UNITED STATES** By F. B. Weeks. U. S. G. S., Bull. 340, p. 441. 6½ pages. 1907.
- See also MISCELLANEOUS DISTRICTS.
- PLATINUM IN THE UNITED STATES** By D. T. Day. Min. & Sci Press, vol. 100, p. 582. ½ column.
- THE PACIFIC COAST BEACH SANDS.** By C. Bartlett. M. & M., vol. 30, p. 375. 3½ columns.
- USEFUL MINERALS IN BLACK SANDS OF PACIFIC COAST.** By D. T. Day and R. H. Richards. U. S. G. S., Mineral Resources, 1905. 73 pages.
- SILVER-LEAD MINES OF THE UNITED STATES.** E. & M. J., vol. 85, p. 374. 1 column.
- THE PRODUCTION OF SLATE IN THE UNITED STATES.** Min. & Sci. Press, vol. 95, p. 467. ½ column.
- FIELD-INVESTIGATIONS OF STRUCTURAL MATERIALS BY THE U. S. GEOLOGICAL SURVEY.** By E. F. Burchard. T. A. I. M. E., vol. 41, p. 490. 4½ pages.
- A NEW SOURCE OF SUPPLY OF SULPHUR.** T. A. I. M. E., vol. 39, p. 522. 18 pages. I.
- TIN DEPOSITS OF THE SOUTHERN APALACHIANS.** By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906. .
- See also MISCELLANEOUS DISTRICTS.

Utah

- A GAZETTEER OF UTAH. By H. Gannett U. S. G. S., Bull. 166. 43 pages. Map 1900
- MINERAL RESOURCES OF UTAH By R. H. Bradford Min. & Sci. Press, vol. 98, p. 187. 5½ columns. Map.
- ANTIMONY IN SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 340, p. 253. 4 pages. 1907.
- ARSENIC MANUFACTURE AT MIDVALE, UTAH By L. A. Palmer. M. & M., vol. 30, p. 641. 7 columns. I.
- COAL BEDS OF PLEASANT VALLEY, UTAH E. & M. J., vol. 85, p. 964. ½ column
- THE PLEASANT VALLEY COAL DISTRICT, CARBON AND EMBURY COUNTIES, UTAH By J. A. Taff. U. S. G. S., Bull. 316, p. 338. 21 pages. I. 1906
- COAL FIELDS OF NORTHWESTERN COLORADO AND NORTHEASTERN UTAH. By H. S. Gale. U. S. G. S., Bull. 341, p. 283. 35 pages. I. 1907
- COAL FIELDS OF NORTHWESTERN COLORADO AND NORTHEASTERN UTAH By H. S. Gale. U. S. G. S., Bull. 415. 265 pages. I. 1910.
- NOTES ON THE WEBER RIVER COAL FIELD, UTAH. By J. A. Taff. U. S. G. S., Bull. 285, p. 285. 4 pages. 1905.
- COAL IN SANPETE COUNTY, UTAH. By G. B. Richardson. U. S. G. S., Bull. 285, p. 280. 7 pages. I. 1905.
- THE HOMINY, COLOB, AND KANAB COAL FIELDS, SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 341, p. 379. 22 pages. I. 1907.
- BOOK CLIFFS COAL FIELD, UTAH, WEST OF GREEN RIVER. By J. A. Taff. U. S. G. S., Bull. 285, p. 289. 14 pages. I. 1905.
- CONSOLIDATED FUEL COMPANY, UTAH. By R. J. Turner. M. & M., vol. 31, p. 385. 4 columns. I.
- THE UTAH COPPER MINE. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 516. 9½ columns. I.
- OPERATIONS OF THE UTAH COPPER COMPANY DURING 1908 By D. C. Jackling. E. & M. J., vol. 87, p. 1185. 11½ columns. I.
- THE SOUTH UTAH MINE AND MILL. By L. A. Palmer. M. & M., vol. 31, p. 592. 8½ columns. I.
- THE BOSTON CONSOLIDATED MINING COMPANY, UTAH. E. & M. J., vol. 85, p. 257. 3 columns.
- BOSTON CONSOLIDATED, BINGHAM, UTAH. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 553. 7 columns. I.
- ORE OCCURRENCE AT FORTUNA MINE, BINGHAM, UTAH. By E. R. Zalinski. E. & M. J., vol. 86, p. 1191. 14 columns. I.
- AMATRICE, A NEW GEM STONE OF UTAH By E. R. Zalinski. E. & M. J., vol. 87, p. 1038. 6 columns.
- MINING IN THE TINTIC DISTRICT OF UTAH. By L. A. Palmer. M. & M., vol. 31, p. 553. 8 columns. I.
- MINES AND MILL OF THE CONSOLIDATED MERCUR COMPANY. By R. H. Allen. E. & M. J., vol. 89, p. 1273. 13½ columns. I.
- SUPPOSED DEPOSITS OF GRAPHITE NEAR BRIGHAM, UTAH. By H. S. Gale. U. S. G. S., Bull. 430, p. 639. 2 pages. 1909.
- THE IRON COUNTY COAL FIELD, UTAH. By W. T. Lee. U. S. G. S., Bull. 316, p. 359. 20 pages. I. 1906
- THE IRON ORES OF THE IRON SPRINGS DISTRICT, SOUTHERN UTAH. By C. K. Leith. U. S. G. S., Bull. 338, 102 pages. I. 1908
- MARBLE OF WHITE PINE COUNTY, NEVADA, NEAR GANDY, UTAH By N. H. Darton. U. S. G. S., Bull. 340, p. 377. 3 pages. 1907.
- OZOKERITE IN UTAH. By H. W. MacFadden. Min. & Sci. Press, vol. 99, p. 789. 2½ columns. I.
- OZOKERITE DEPOSITS IN UTAH. By J. A. Taff and C. D. Smith. U. S. G. S., Bull. 285, p. 369. 4 pages. 1905.

PETROLEUM IN SOUTHERN UTAH By G. B. Richardson. U. S. G. S., Bull. 340, p. 343. 5 pages. 1907.

THE NEW OILFIELD IN UTAH. By A. P. Rogers E. & M. J., vol. 87, p. 989. 2½ columns. I.

PHOSPHATE DEPOSITS EAST OF OGDEN, UTAH. By E. Blackwelder. U. S. G. S., Bull. 430. p. 536. 15 pages I. 1909

PARK CITY, UTAH Min. & Sci. Press, vol 100, p 793 4 columns I.

THE COVE CREEK SULPHUR BEDS, UTAH By W. T. Lee. U. S. G. S., Bull. 315, p. 485. 5 pages. 1906.

Venezuela

PETROLEUM IN VENEZUELA E & M. J., vol. 90, p. 506. 1½ columns.

PETROLEUM INDUSTRY, VENEZUELA. M. & M., vol. 31, p. 158. 1½ columns

THE GRAN PROBRE SILVER MINE IN VENEZUELA. By C. Kissler. Min. Mag., vol. 2, p. 121. 4 pages.

Vermont

THE GRANITES OF VERMONT. By T. N. Dale. U. S. G. S., Bull. 404. 138 pages. I. 1909.

THE SLATE QUARRIES OF VERMONT. By C. S. Richardson. Min. Mag., vol. 2, p. 271. 12 pages.

TALC AND SOAPSTONE IN VERMONT. By G. H. Perkins. E. & M. J., vol. 86, p. 753. 2½ columns.

Virginia

GAZETTEER OF VIRGINIA. By H. Gannett. U. S. G. S., Bull. 232. 159 pages. 1904.

THE VIRGINIA BARITE-DEPOSITS. By T. L. Watson. T. A. I. M. E., vol. 38, p. 710. 24 pages. I.

THE POCKET COAL DISTRICT, VIRGINIA, IN THE LITTLE BLACK MOUNTAIN COAL FIELD. By C. A. Fisher. U. S. G. S., Bull. 341, p. 409. 10 pages. I. 1907.

THE RUSSELL FORK COAL FIELD, VIRGINIA. By R. W. Stone U. S. G. S., Bull. 316, p. 55 14 pages. I. 1906.

SALT AND GYPSUM OF THE PRESTON VALLEY OF THE HOLSTON RIVER, VIRGINIA. By H. D. Rogers Min. Mag., vol. 4, p. 28 7 pages.

THE IRON ORES OF THE APPALACHIAN REGION IN VIRGINIA. By E. C. Harder. U. S. G. S., Bull. 380, p. 215. 40 pages. I. 1908

THE PRIDEVALE IRON COMPANY'S MINES, VIRGINIA. By W. B. Rogers. Min Mag, vol. 3, p. 489. 8½ pages; vol. 5, p. 397. 14 pages. I Map.

MANGANESE DEPOSITS OF VIRGINIA. By S. M. Ball. E & M. J., vol. 87, p. 1056. 1½ columns.

MANGANESE DEPOSITS OF THE BLUE RIDGE, VIRGINIA By L. G. Lockey. E & M. J., vol. 89, p. 867. 1 column.

NICKEL IN SOME VIRGINIA IRON-ORES. T. A. I. M. E., vol. 39, p. 547. 2 pages.

THE OCCURRENCE OF NICKEL IN VIRGINIA. By T. L. Watson. T. A. I. M. E., vol. 38, p. 683. 16 pages. I.

THE VIRGINIA RUTILE DEPOSITS By T. L. Watson and S. Taber. U. S. G. S., Bull. 430, p. 200. 14 pages. I. 1909.

RUTILE DEPOSITS OF VIRGINIA. Min. & Sci. Press, vol. 98, p. 896. 1½ columns.

SALT OF THE PRESTON VALLEY, VIRGINIA. By H. D. Rogers. Min. Mag., vol. 4, p. 28. 7 pages.

IRON AND ZINC IN SOUTHWESTERN VIRGINIA. E. & M. J., vol. 86, p. 908. 3 columns. I.

LEAD AND ZINC ORES OF VIRGINIA. By M. M. Caldwell. M. & M., vol. 30, p. 269. 2 columns.

Washington

CEMENT RESOURCES OF WASHINGTON. By H. Landes. U. S. G. S., Bull. 285, p. 377. 8 pages. 1905.

THE COAL RESOURCES OF WASHINGTON. By R. P. Tait. M. & M., vol. 30, p. 17, 6 columns, I; p. 108, 6 columns, I; p. 155, 7 columns, I, p. 311, 8 columns, I.

MINES IN REPUBLIC DISTRICT, WASHINGTON. By W. A. Scott. Min. & Sci. Press, vol. 101, p. 200, 4 columns, I.

GOLD-BEARING RIVER SANDS OF NORTHEASTERN WASHINGTON. By A. J. Collier. U. S. G. S., Bull. 315, p. 56, 15 pages. 1906

TIN ORE AT SPOKANE, WASHINGTON. By A. J. Collier. U. S. G. S., Bull. 340, p. 295, 12 pages, I. 1907.

TUNGSTEN ORE IN WASHINGTON. By A. Wolf. M. & M., vol. 31, p. 307, 2 columns.

NOTES ON TUNGSTEN DEPOSITS NEAR DEER PARK, WASHINGTON. By H. Bancroft. U. S. G. S., Bull. 430, p. 214, 3 pages. 1909.

West Indies

A GAZETTEER OF CUBA. By H. Gannett. U. S. G. S., Bull. 192, 113 pages, I. 1902.

A GAZETTEER OF PORTO RICO. By H. Gannett. U. S. G. S., Bull. 183, 51 pages. 1901.

MINING IN THE PROVINCE OF ORIENTE, CUBA. By W. T. Grey. E. & M. J., vol. 89, p. 1235, 1 column.

NOTES ON SOME ORE DEPOSITS OF PORTO RICO. By S. H. Hamilton. E. & M. J., vol. 88, p. 518, 4 columns, I.

HISTORY OF GOLD MINING IN PORTO RICO. Min. & Sci. Press, vol. 97, p. 96, 5½ columns; p. 126, 7½ columns, I.

MANJAK AS WORKED AT THE VISTABELLA MINE, TRINIDAD. By J. C. T. Raspas. T. I. M. E., vol. 36, p. 119, 5 pages.

BARITE ASSOCIATED WITH IRON-ORE IN PINAR DEL RIO PROVINCE, CUBA. By C. Catlett. T. A. I. M. E., vol. 38, p. 358, 1½ pages.

CHARACTER OF THE CUBAN COPPER MINES. J. C. M. I., vol. 13, p. 97, 2½ pages.

"TWO CUBAN MINES": Copper. By B. B. Lawrence. J. C. M. I., vol. 13, p. 91, 18 pages, I.

EL COBRE COPPER MINE. By B. B. Lawrence. M. & M., vol. 31, p. 235, 10½ columns, I.

EL COBRE MINES, CUBA. By E. G. Tuttle. M. & M., vol. 31, p. 449, 11 columns, I.

COPPER ORES IN PORTO RICO. E. & M. J., vol. 88, p. 518, ½ column.

CUBAN GOLD MINES. By E. B. Wilson. M. & M., vol. 31, p. 240, 1 column.

CUBAN GOLD MINING. By E. W. Dennison. Min. & Sci. Press, vol. 97, p. 500, ½ column.

GOLD MINING IN PORTO RICO. By W. B. McKinlay. Min. & Sci. Press, vol. 97, p. 96, 5½ columns; p. 126, 7½ columns, I.

IRON ORES OF SANTIAGO, CUBA. By E. B. Wilson. M. & M., vol. 31, p. 245, 8½ columns, I.

THREE DEPOSITS OF IRON ORE IN CUBA. By A. C. Spencer. U. S. G. S., Bull. 340, p. 318, 12 pages, I. 1907.

THE RESIDUAL BROWN IRON-ORES OF CUBA. By C. M. Weld. T. A. I. M. E., vol. 40, p. 299, 13½ pages, I.

West Virginia

GAZETTEER OF WEST VIRGINIA. By H. Gannett. U. S. G. S., Bull. 233, 164 pages. 1904.

NOTES ON THE COAL INDUSTRY IN WEST VIRGINIA. By R. B. Brinsmade. E. & M. J., vol. 90, p. 775, 4½ columns.

UPPER POTOMAC COAL FIELDS, WEST VIRGINIA. By H. H. Stock. M. & M., vol. 30, p. 201, 8 columns, I.

COAL MINING IN CENTRAL WEST VIRGINIA. By F. W. Parsons. E. & M. J., vol. 87, p. 1284, 16 columns, I.

COAL FIELDS OF CENTRAL WEST VIRGINIA. By H. H. Stoeck M. & M., vol 30, p 188. 10 columns. I.

COAL FIELDS OF WEST VIRGINIA By H. H. Stoeck. M. & M., vol. 29, p 219, 6½ columns, I.; p. 283, 7½ columns, I. and Map; p. 303, 8½ columns, I.; p. 509, 11½ columns. I.

THE KANAWHA REGION, WEST VIRGINIA. By H. H. Stoeck M. & M., vol. 30, p. 36, 9 columns, I., p. 70, 8½ columns, I.

COAL MINING IN KANAWHA VALLEY, WEST VIRGINIA. By S. M. Buck. U. S. G. S., Mineral Resources, 1883 and 1884.

CORRELLATION THACKER FIELD, WEST VIRGINIA. By A. H. Stow. M. & M., vol 31, p. 83. 4½ columns. I.

A SKETCH OF THE MINES AND COPPER REGION OF SOUTHWESTERN VIRGINIA By W J. March. Min. Mag., vol 9, p. 217. 3½ pages.

THE GLASS-SAND INDUSTRY IN EASTERN WEST VIRGINIA. By G. W. Stose. U. S. G. S., Bull. 285, p. 473. 3 pages. 1905.

WEST VIRGINIA OIL AND GAS NOTES. E. & M. J., vol. 90, p. 823. 4½ columns.

OIL FIELD AT FOLLANSBEE, WEST VIRGINIA. By F. W. Brady. M. & M., vol. 29, p. 207. 4½ columns. I.

NOTES FROM THE OIL FIELDS. By F. W. Brady. M. & M., vol. 30, p. 156. 3½ columns. I.

Wisconsin

COPPER IN SOUTHWESTERN WISCONSIN. By G. H. Cox. Min. & Sci. Press, vol. 99, p. 592 1½ columns. I.

THE PENOKEE IRON-BEARING SERIES OF MICHIGAN AND WISCONSIN. By R. D. Irving and C. R. Van Hise. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 341-507. 1888-89. I.

THE IRON ORES OF WISCONSIN. By E. Daniels. Min. Mag., vol. 10, p. 13. 12 pages.

THE EMPIRE-ENTERPRISE ZINC MINES, WISCONSIN. By H. C. George E. & M. J., vol. 89, p 1280 6½ columns. I.

THE LEAD VEINS OF WISCONSIN. Min. Mag., vol. 2, p. 493. 11½ pages.

Wyoming

GEOLOGY AND MINERAL RESOURCES OF THE LARAMIE BASIN, WYOMING. By N. H. Darton and C. E. Siebenthal. U. S. G. S., Bull. 364. 81 pages. I. 1909

THE ASBESTOS INDUSTRY IN CENTRAL WYOMING. By F. H. Bartow. E. & M. J., vol. 90, p. 559. 3 columns. I.

ASBESTOS IN WYOMING. By H. C. Beeler. E. & M. J., vol. 90, p. 955. 2½ columns. I.

BENTONITE OF THE LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 445. 4 pages. 1905.

PORTLAND CEMENT MATERIALS IN EASTERN WYOMING. By O. H. Ball. U. S. G. S., Bull. 315, p. 232. 12 pages. I. 1906.

THE THICKEST COAL SEAM: Wyoming. E. & M. J., vol. 86, p. 1169. ½ column

A MODEL COAL MINING PLANT IN WYOMING. By H. M. Payne. E. & M. J., vol. 90, p. 224. 8½ columns. I.

COAL AND OIL IN SOUTHERN Uinta COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331 23 pages. I. 1905.

THE WESTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball. U. S. G. S., Bull. 341, p. 243. 12½ pages. I. 1907.

THE EASTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball and E. Stebinger. U. S. G. S., Bull. 381, p. 186. 28 pages. I. 1908.

- THE NORTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 341, p. 256. 27 pages. I. 1907.
- THE SOUTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 381, p. 214. 68 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA. By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- COAL FIELDS OF THE SOUTHWEST SIDE OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 341, p. 200. 18 pages. I. 1907.
- THE COAL FIELD IN THE SOUTHEASTERN PART OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 381, p. 170. 16 pages. I. 1908.
- COAL FIELDS OF EAST-CENTRAL CARBON COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 316, p. 244. 16 pages. I. 1906.
- COAL FIELDS IN A PORTION OF CENTRAL UINTA COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 316, p. 212. 30 pages. I. 1906.
- THE BUFFALO COAL FIELD, WYOMING. By H. S. Gale and C. H. Wegemann. U. S. G. S., Bull. 381, p. 137. 32 pages. I. 1908.
- THE EASTERN PART OF THE GREAT DIVIDE BASIN COAL FIELD, WYOMING. By E. E. Smith. U. S. G. S., Bull. 341, p. 220. 23 pages. I. 1907.
- THE POWDER RIVER COAL FIELD, WYOMING, ADJACENT TO THE BURLINGTON RAILROAD. By R. W. Stone and C. T. Lupton. U. S. G. S., Bull. 381, p. 115. 22 pages. I. 1908.
- COAL OF LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 316, p. 261. 3 pages. 1906.
- COAL AND OIL IN SOUTHERN UINTA COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.
- THE SHERIDAN COAL FIELD, WYOMING. By J. A. Taff. U. S. G. S., Bull. 341, p. 123. 14 pages. 1907.
- GEOGRAPHY AND GEOLOGY OF A PORTION OF SOUTHWESTERN WYOMING, WITH SPECIAL REFERENCE TO COAL AND OIL. By A. C. Veatch. U. S. G. S., Professional Paper 56. 178 pages. I. 1907.
- THE COAL MINES OF SOUTHERN WYOMING. By F. W. Parsons. E. & M. J., vol. 85, p. 118. 6½ columns. I.
- THE DIAMONDVILLE COALFIELD, WYOMING. By A. T. Shurick. E. & M. J., vol. 85, p. 116. 6 columns. I.
- THE GLENROCK COAL FIELD, WYOMING. By E. W. Shaw. U. S. G. S., Bull. 341, p. 151. 14 pages. I. 1907.
- THE LANDER COAL FIELD, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 316, p. 242. 2 pages. 1906.
- COPPER DEPOSITS OF THE HARTVILLE UPLIFT, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 93. 14 pages. 1906.
- LAKE CREEK, WYOMING, A NEW MINING DISTRICT. By W. Benton. E. & M. J., vol. 86, p. 36. 1 column.
- GOLD DEVELOPMENTS IN CENTRAL UINTA COUNTY, WYOMING, AND AT OTHER POINTS ON SNAKE RIVER. By A. R. Schultz. U. S. G. S., Bull. 315, p. 71. 18 pages. I. 1906.
- WIND RIVER PLACERS, WYOMING. By J. H. Hastings. Min. & Sci. Press, vol. 98, p. 864. 1 column.
- GRAPHITE IN THE HAYSTACK HILLS, LARAMIE COUNTY, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 426. 2 pages. 1906.
- GYPSUM DEPOSITS OF THE LARAMIE DISTRICT, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 404. 2 pages. 1905.

THE HARTVILLE IRON-ORE RANGE, WYOMING. By S H Ball. U S G S., Bull. 315, p. 190. 15½ pages. I. 1906.

TITANIFEROUS IRON ORE OF IRON MOUNTAIN, WYOMING. By S H Ball. U S G S., Bull. 315, p. 206. 7 pages. 1906.

MICA IN THE HARTVILLE UPLIFT, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 423. 3 pages. 1906.

THE LABARGE OIL FIELD, CENTRAL UINTA COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 340, p. 364. 9 pages. I. 1907.

PLATINUM IN RAMBLER MINE, WYOMING. By J. F. Kemp. U S G. S., Mineral Resources, 1902. 7 pages.

PRELIMINARY REPORT ON THE PHOSPHATE DEPOSITS IN SOUTHEASTERN

IDAHO AND ADJACENT PARTS OF WYOMING AND UTAH. By H. S. Gale and R. W. Richards. U. S. G. S., Bull. 430, p. 457. 82 pages. I. 1909.

THE SALT RESOURCES OF THE IDAHO-WYOMING BORDER, WITH NOTES ON THE GEOLOGY. By C. L. Berger. U S G. S., Bull. 430, p. 555. 15 pages. 1909

DEPOSITS OF SODIUM SALTS IN WYOMING. By A. R. Schultz. U. S. G. S., Bull. 430, p. 570. 19 pages. I. 1909.

SULPHUR DEPOSITS NEAR THERMOPOLIS, WYOMING. By E. G. Woodruff. U S G S., Bull. 380, p. 373. 8 pages. I. 1908.

SULPHUR DEPOSITS AT CODY, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 340, p. 451. 6 pages. I. 1907.

MINE DRAINAGE

Drainage in General

CURRENT PUMPS FOR MINING. By F. Reed. M. & M., vol. 30, p. 653. 3½ columns. I.

DIVERTING WATER IN A WET SHAFT. By A. D. Cox. M. & M., vol. 30, p. 415. ½ column. I.

PUMPING DURING SHAFT SINKING. M. & M., vol. 30, p. 404. 5 columns. I.

See also SHAFT SINKING.

THE DRAINAGE OF THE NEW CHUM LINE OF REEF. By F. G. Buckell. T. A. I. M. E., vol. 8, pt. 2, p. 250. 4 pages. Map. D.

DRAINAGE IN THE JOPLIN REGION, MISSOURI: Shadow streams, etc. T. A. I. M. E., vol. 38, p. 327. 2 pages.

PUMPING PROBLEMS OF THE JOPLIN DISTRICT. By D. Brittain. E. & M. J., vol. 86, p. 214. 10½ columns. I.

MINE DRAINAGE IN JOPLIN DISTRICT. By L. L. Wittich. M. & M., vol. 30, p. 535. 5½ columns. I.

STORM WATER DRAINS AND DATA. By J. B. Balcomb. J. W. Soc. E., vol. 15, p. 699. 40 pages. I.

TAPPING MINE WATER UNDER PRESSURE. E. & M. J., vol. 86, p. 230. 1 column.

See also USE OF BORE HOLES.

NEW METHOD OF EXTRACTING OIL FROM BOREHOLES. By F. A. Talbot. E. & M. J., vol. 87, p. 1001. 6 columns. I.

LEINWEBER METHOD OF EXTRACTING OIL FROM WELLS. By F. A. Talbot. E. & M. J., vol. 89, p. 1270. 4 columns. I.

DETERMINING HEIGHT OF WATER IN INACCESSIBLE OPEN PIT. By B. H. Case. E. & M. J., vol. 85, p. 301. 1½ columns. I.

THE DISCHARGE OF SEWAGE INTO TIDAL WATERS. By G. A. Soper. Sch. Mines Quart., vol. 30, p. 239. 12½ pages.

Theory of Pumping

See first volume of Index

Pump Tests, Efficiency, etc.

See first volume of Index

Pumps for Mine Use

REVIEW OF PAST AND PRESENT STEAM PUMPING AT MINES. By J. Tipping. T. Au. I. M. E., vol. 2, p. 31. 19½ pages.

METHODS OF PUMPING DEEP GROUND WATERS. By C. B. Burdick. J. W. Soc. E., vol. 12, p. 719. 37 pages. I.

THE PUMPING PROBLEMS AT THE TOMBSTONE MINE. By W. F. Staunton E. & M. J., vol. 89, p. 174. 3½ columns.

PUMPING AT BISBEE, ARIZONA. By C. C. Austin. M. & M., vol. 31, p. 132. 4 columns. I.

PUMP STATION AT LEONARD MINE, BUTTE. E. & M. J., vol. 90, p. 400. 2½ columns. I.

THE OLD DOMINION PUMPING SYSTEM. By R. L. Herrick. M. & M., vol. 31, p. 324. 6 columns. I.

DEEP PUMPING ON THE COMSTOCK. M. & M., vol. 30, p. 761. 5½ columns. I.

PUMPING PLANT AT THE WARD SHAFT, VIRGINIA CITY, NEVADA. E. & M. J., vol. 89, p. 575. 1½ columns. I.

PUMPING PLANT AT THE TOMBSTONE CONSOLIDATED. By E. W. Walker. E. & M. J., vol. 88, p. 160. 5½ columns. I.

AN URGENT PUMPING PROBLEM AND HOW IT WAS SOLVED. By J. A. Seager. E. & M. J., vol. 88, p. 509. 2½ columns. I.

THE EMERSON STEAM PUMP. E. & M. J., vol. 85, p. 555. 1½ columns. I.

LOWERING A LARGE PUMP INTO A MINE. By G. J. Young E. & M. J., vol. 87, p. 806. 2½ columns. I.

THE SINKING PUMP AND ITS TROUBLES. By M. T. Hoster E. & M. J., vol. 89, p. 601. 2½ columns. I.

See also **SHAFT SINKING**

See also **COST OF PUMPING AND BAILING.**

Water Rings for Mine Shafts

WATER RINGS IN THE FILBERT SHAFT, PENNSYLVANIA. M. & M., vol. 30, p. 560. ¾ column. I.

WATER-RINGS FOR CIRCULAR SHAFTS. T. I. M. E., vol. 38, p. 25. ¼ page.

Rotary Pumps

CENTRIFUGAL PUMPS. By W. R. Wiley. J. W. Soc. E., vol. 15, p. 228. 36 pages. I.

KINEMATICS OF ONE FORM OF ROTARY PUMP OR BLOWER. By S. W. Balch. Sch. Mines Quart., vol. 30, p. 21. 6 pages. I.

THE DESIGN OF CENTRIFUGAL PUMPS. By J. A. Seager. E. & M. J., vol. 90, p. 1216. 6 columns. I.

CENTRIFUGAL PUMP EFFICIENCY. By V. V. Messer. Min. & Sci. Press, vol. 98, p. 696. 4½ columns. I.

EFFICIENCY OF CENTRIFUGAL PUMPS. By F. W. Kerns. Min. & Sci. Press, vol. 100, p. 862. 2½ columns.

MOTOR DRIVEN CENTRIFUGAL PUMP FOR MINE USE. By C. Robinson. E. & M. J., vol. 87, p. 404. 3½ columns. D.

MINE PUMPING WITH DIRECT CONNECTED ELECTRICALLY DRIVEN TURBINE PUMPS. By P. H. Moore. J. M. Soc. N. S., vol. 12, p. 1. 8½ pages.

See also **ELECTRICITY IN THE MINE.**

THE LEA-DEGEN TURBINE PUMP. E. & M. J., vol. 86, p. 1005. 2 columns. I.

INSTALLATION AND USE OF TURBINE PUMPS. By M. S. Hachita. Coal Mining Supplement, E. & M. J., vol. 88, p. 22. 8½ columns. I.

Cornish Pumps

CORNISH PUMPS Min. & Sci. Press, vol. 97, p. 46, 4½ columns, I.; p. 83, 3 columns; p. 179, 4 columns. D

CORNISH PUMPS AND PUMPING ENGINES. By H. F. Collins. Min. & Sci. Press, vol. 98, p. 289, 3½ columns; p. 317, 4½ columns. D.

COMPOUND CORNISH PUMPING ENGINES. By W. P. Gauvain. Min. & Sci. Press, vol. 99, p. 62. 5½ columns. Diagrams.

See also **COST OF PUMPING AND BAILING.**

Hand Pumps and Water Portage

See first volume of Index.

Hydraulic Pumps

THE KOEBTING WATER-JET EDUCTOR. E. & M. J., vol. 85, p. 1251. ½ column. I.

INJECTOR OF HYDRAULIC SYSTEM USED IN THE C. AND C. SHAFT, COMSTOCK LODGE. M. & M., vol. 29, p. 154. I.

See also **HYDRAULIC MINING.**

Siphons in Mines

THE SIPHON IN MINING. By J. T. Beard. M. & M., vol. 31, p. 427. 4½ columns. I.

PUMPING AND SIPHONING HOT WATER. By J. T. Beard. M. & M., vol. 31, p. 663. 3 columns. I.

Compressed Air Pumping

THE AIR-LIFT PUMP. J. W. Soc. E., vol. 12, p. 751. 2 pages. I.

AIR-LIFT PUMP EMPLOYED IN UNWATERING MINE AFTER MINE FIRE. E. & M. J., vol. 85, p. 640. 4 columns. I.

DIRECT AIR-PRESSURE PUMPING. Min. & Sci. Press, vol. 96, p. 819. 2½ columns. I.

AIR LIFT PUMPING. By E. A. Rix. Min. & Sci. Press, vol. 101, p. 505. 4 columns. Tables.

EFFICIENCY OF THE AIR LIFT AS A SOLUTION PUMP. By L. M. Green. E. & M. J., vol. 88, p. 251. 13½ columns. I.

NOTES ON THE POHLE AIR LIFT. By W. S. Anderson. E. & M. J., vol. 89, p. 256. 2½ columns.

RAISING LIQUIDS BY COMPRESSED AIR. E. & M. J., vol. 87, p. 646. ¾ column. I.

THE ECONOMIC USE OF COMPRESSED AIR IN THE ELEVATION OF TAILINGS. By J. W. Archibald. T. Au I. M. E., vol. 8, pt. 1, p. 103. 4½ pages.

UNWATERING SHAFT BY COMPRESSED AIR. By L. Boudoire. E. & M. J., vol. 90, p. 848. 1½ columns. I.

See also **SHAFT SINKING.**

ELECTRIC REHEATER FOR AIR-DRIVEN PUMPS. E. & M. J., vol. 89, p. 1216. 1 column. I.

See also **COMPRESSED AIR IN MINING.**

Vacuum Pumps

THE VACUUM-PUMP IN THE CYANIDING OF SAND. By W. A. Caldecott. Min. & Sci. Press, vol. 98, p. 316. 1½ columns.

THE USE OF THE VACUUM PUMP IN THE CYANIDING OF SAND. P. C. M. & M. Soc. S. A., vol. 9, p. 240. 2 columns.

Sinking Pumps

See first volume of Index.

Electrically Driven Pumps

ELECTRICALLY DRIVEN MINE PUMPS. By S. F. Walker. E. & M. J., vol. 87, p. 422. 4 columns.

ELECTRICAL MINE-PUMPS IN EUROPE. By A. S. Atkinson. Min. & Sci. Press, vol. 99, p. 334. 4 columns.

EXPERIMENTS WITH TWO ELECTRICALLY-DRIVEN PUMPS. By T. L. Galloway. T. I. M. E., vol. 36, p. 82. 11 pages.

See also **ELECTRICITY IN MINING.**

See also **ELECTRIC HOISTING.**

See also **COST OF PUMPING AND BAILING.**

Bailing Water

BAILING WATER AT COLEMAN SHAFT. By F. G. Brackett M & M, vol. 31, p. 631. 3 columns I.

WATER TANK AND COUNTERWEIGHT USED AT THE ROOSEVELT TUNNEL. M & M, vol. 29, p. 391. $\frac{1}{2}$ column. I

HOISTING MINE WATER. E & M. J., vol. 87, p. 1281. $3\frac{1}{2}$ columns.

See also **HOISTING IN MINING.**

See also **COST OF PUMPING AND BAILING.**

Unwatering Shafts

UNWATERING THE MEXIAMORA MINE AT GUANAJUATO. By F. H. Clark. E. & M. J., vol. 89, p. 271. $4\frac{1}{2}$ columns. I.

UNWATERING FLOODED MINES. By D. Lamont. E. & M. J., vol. 90, p. 639 3 columns

RECLAIMING FLOODED DRIFT MINES IN ALASKA. By W. H. Lanagan. Min. & Sci. Press, vol. 100, p. 892. $6\frac{1}{2}$ columns. I.

Drainage Tunnels

COMSTOCK DRAINAGE PROBLEMS. By L. M. Hall. Min. & Sci. Press, vol. 99, p. 27. $5\frac{1}{2}$ columns. I.

CUSTOM TUNNELS FOR DRAINAGE AND TRANSPORTATION OF ORE. E. & M. J., vol. 85, p. 852. $2\frac{1}{2}$ columns.

THE ROOSEVELT DEEP DRAINAGE TUNNEL, COLORADO. By R. M. Bagg. E. & M. J., vol. 88, p. 1061. 5 columns. I.

THE LOS ANGELES AQUEDUCT TUNNEL WORK. Min. & Sci. Press, vol. 100, p. 681. $3\frac{1}{2}$ columns. I.

See also **TUNNELING.**

See also **EXAMPLE OF TUNNELS.**

Pipes and Pipe Fitting

CAPACITY OF PIPES P. C. M. & M. Soc. S. A., vol. 9, p. 320. $\frac{1}{2}$ column.

TESTS OF CAST IRON REINFORCED CONCRETE CULVERT PIPE. By A. N. Talbot J. W. Soc. E., vol. 13, p. 376. 58 pages I.

FORGED-STEEL BOLTED PIPE CONNECTION E & M J., vol. 85, p. 1195. $\frac{1}{2}$ column. I

CONCRETE PIPE CULVERTS. By O. P. Chamberlain J. W. Soc. E., vol. 12, p. 81. 19 pages. I.

See also **USE OF CONCRETE IN MINES.**

WOOD PIPES M. & M, vol. 29, p. 322. 1 column.

ZOLLNERS' PATENT WATER PIPE. By F. D. Power. T. Au. I. M. E., vol. 5, p. 131. 7 pages. Table

CONSTRUCTION OF UNDERGROUND PIPELINES. T. I. M. & M., vol. 17, p. 450, 1 page, I.; p. 457, 1 page, I.

TABLE OF GRADES FOR LAUNDERS AND PIPES IN REDUCTION PLANTS. By C. O. Schmitt. P. C. M. & M. Soc. S. A., vol. 9, p. 242. 1 column. Table.

See also **LAUNDERS AND DISTRIBUTORS.**

A CALIFORNIA PIPE LINE. E. & M. J., vol. 86, p. 707. 1 column.

See **COST OF PIPES AND PIPE LAYING.**

Ditches and Channels

DITCHES: Method of Calculating Sections and Construction for Mining Work. By D. Waterman. Min. & Sci. Press, vol. 98, p. 352. 8 columns. I. Diagrams.

See also **COST OF FLUME CONSTRUCTION.**

Valves, Valve-Gear, Sumps, etc.

See first volume of Index.

DRILLING AND BORING

General

THE HISTORY OF THE ROCK DRILL. By W. L. Saunders. E. & M. J., vol. 90, p. 12. 2 columns.

HISTORY OF THE ROCK DRILL. By W. L. Saunders. Min. & Sci. Press, vol. 100, p. 735. 2 columns.

THE HISTORY OF THE ROCK DRILL. By W. L. Saunders. M. & M., vol. 31, p. 18. 1½ columns.

HISTORY OF THE WATER LEYNER DRILL. By C. A. Hirschberg. M. & M., vol. 31, p. 148. 2 columns.

EVOLUTION OF WELL-DRILLING MACHINERY. By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 676. 3½ columns.

See also HISTORY OF MINING.

CONTRACT FOR DRILLING. Min. & Sci. Press, vol. 99, p. 615. ½ column.

Hand Drills

THE HAND DRILL IN PROSPECTING PLACER DEPOSITS. By J. P. Hutchins. E. & M. J., vol. 86, p. 1141. 13½ columns. I.

HAND BORING BY THE VICTORIAN MINES DEPARTMENT. T. Au. I. M. E., vol. 7, p. 49. 7 pages. I.

WEAR OF STEEL IN HAND DRILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 153. ½ column.

NOTES ON HAMMER DRILL WORK AT THE GRANITE MINES, BRITISH COLUMBIA. By H. B. Williams. T. I. M. & M., vol. 19, p. 463. 5½ pages. I.

HAND DRILLING IN ALLUVIUM. By E. K. Hall. Min. & Sci. Press, vol. 101, p. 118. 2 columns.

HAND CHURN DRILLING. By O. H. Packer. Min. & Sci. Press, vol. 99, p. 296. 1½ columns.

See also COST OF DRILLING AND BORING.

Machine or Power Drills

NOTES ON THE CONSTRUCTION AND PRACTICAL OPERATION OF ROCK DRILLING MACHINES. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 6, p. 38, 20½ columns, I.; p. 118, 24½ columns, I.; p. 162, 11 columns; p. 193, 3 columns; p. 217, 11½ columns.

NOTES ON SMALL STOPE DRILLS. By E. M. Weston. P. C. M. & M. Soc. S. A., vol. 8, p. 109. 23 columns, I.; p. 151, 2½ columns; p. 189, 1 column; p. 210, 20 columns; p. 270, 15 columns.

AIR-DRILLS AND THEIR EFFICIENCY. By S. K. Patterson. Min. & Sci. Press, vol. 97, p. 467. 2½ columns.

EFFECT OF HIGH AND LOW AIR PRESSURE IN OPERATING DRILLS. P. C. M. & M. Soc. S. A., vol. 8, p. 216. 1 column.

THE SCIENCE OF ECONOMICALLY MINING HARD GROUND WITH PRECUSSIVE ROCK DRILLS AND COMPRESSED AIR. By W. A. T. Davies. T. Au. I. M. E., vol. 11, p. 151. 13 pages. I.

ROCK DRILLS AND AIR ECONOMY. E. & M. J., vol. 87, p. 895. 3 columns. I.

MODERN ROCK DRILLING. M. & M., vol. 30, p. 385. 5 columns. I.

DRILLING MACHINES. Min. & Sci. Press, vol. 20, p. 56. ½ column.

MACHINE VS. HAND DRILLING IN SINKING ON THE RAND. By E. M. Weston. E. & M. J., vol. 85, p. 439. 10½ columns. I.

MACHINE WORK VS. HAND DRILLING, SOUTH AFRICA. T. Au. I. M. E., vol. 5, p. 33. Tables.

THE GORDON DRILL. E. & M. J., vol. 87, p. 468. ½ column. I.

THE WALSKI HYDRAULIC ROCK DRILL. By F. A. Talbot. E. & M. J., vol. 89, p. 1278. 5 columns. I.

THE SCOTT GASOLINE ROCK DRILL
E. & M. J., vol 86, p. 1008. $\frac{1}{2}$ col-
umn. I.

**THE STEPHENS CLIMAX IMPERIAL HAM-
MER DRILL.** By E. M. Weston.
E. & M. J., vol. 87, p. 657. $3\frac{1}{2}$ col-
umns. I

**MINE DRILLING IN THE HOG MOUN-
TAIN MINES, ALABAMA.** T. A. I. M.
E., vol 39, p. 581. $\frac{1}{2}$ page

MACHINE DRILLS FOR STOPING. By
E. M. Weston. E. & M. J., vol. 85,
p. 1002. $12\frac{1}{2}$ columns, I; p. 1045,
 $8\frac{1}{2}$ columns, I.

DRIFTING WITH A STOPING DRILL. By
H. E. Moon. M. & M., vol 31,
p. 697. $\frac{1}{2}$ column I.

**COMPARATIVE VALUE OF DRILLS IN
STOPING.** E. & M. J., vol. 87, p. 895.
1 column. I

LARGE DRILLS IN STOPING. E. & M. J.,
vol 89, p. 19. 1 column

DRILLS FOR STOPING By A. Del Mar.
Min. & Sci. Press, vol. 96, p. 169.
2 columns

**METHOD OF DRILLING AND ORDER OF
BLASTING THE ROOSEVELT TUNNEL,
COLORADO.** E. & M. J., vol. 88, p.
1062. D.

**FAILURE OF STOPE DRILLS ON THE
RAND.** E. & M. J., vol 85, p. 110.
 $1\frac{1}{2}$ columns.

DUST COLLECTOR FOR ROCK DRILLS.
E. & M. J., vol. 85, p. 957. $\frac{1}{2}$ col-
umn.

See also **HEALTH OF MINERS, and COST
OF DRILLING AND BORING.**

Air-Hammer Drills

**REQUISITES FOR AIR-HAMMER DRILL
BITS.** By G. E. Walcott. Min. &
Sci. Press, vol. 101, p. 674. $1\frac{1}{2}$ col-
umns. I.

**THE MERITS AND DEMERITS OF AIR-
HAMMER DRILLS.** By G. E. Wal-
cott. E. & M. J., vol. 85, p. 351.
 $8\frac{1}{2}$ columns. I.

**THE DEVELOPMENT OF THE HAMMER
DRILL** P. C. M. & M. Soc. S. A.,
vol 8, p. 63. $2\frac{1}{2}$ columns.

**DEVELOPMENT OF THE AIR-HAMMER
ROCK DRILL.** By C. T. Rice. E. &
M. J., vol. 85, p. 1035. 4 columns. I.

**HAMMER TYPE OF DRILLS VS. RECIP-
ROCATING PISTONS** P. C. M. & M.
Soc. S. A., vol 8, p. 213. 1 column
See also **COST OF DRILLING AND BOR-
ING.**

Electric Drills

**COMPARATIVE MERITS OF AIR AND
ELECTRIC DRILLS** P. C. M. & M.
Soc. S. A., vol. 7, p. 59. 1 column

**A NOVEL ROCK DRILL: Electrically
Driven.** By A. Gradenwitz. E. &
M. J., vol 87, p. 1181. 2 columns. I.

**THE MOTOR ELECTRIC DRILLS FOR
MINING SERVICE** T. A. I. M. E.,
vol. 5, p. 24. 8 pages. I

THE ELECTRIC-AIR DRILL By W. L.
Saunders. T. A. I. M. E., vol 38,
p. 472. 10 pages I.

See also **COST OF DRILLING AND BOR-
ING.**

Forming and Tempering Drills

DRILL STEEL. P. C. M. & M. Soc. S.
A., vol. 8, p. 262. 2 columns. I.

**CROSSFORM STEEL FOR MACHINE-
DRILLS.** By E. P. Kennedy. Min.
& Sci. Press, vol 97, p. 391. $1\frac{1}{2}$ col-
umns.

STOPING-DRILL STEELS. M. & M.,
vol. 31, p. 717. 2 columns I.

DRILL STEEL BITS AND DRILL STEEL.
T. A. I. M. E., vol. 11, p. 156. 1
page.

ROCK DRILL BITS. By T. H. Proske.
Min. & Sci. Press, vol. 100, p. 347.
 $5\frac{1}{2}$ columns. I.

**SELECTION AND USE OF BITS FOR
POWER DRILLS.** By M. De Cennes.
E. & M. J., vol. 87, p. 1183. $4\frac{1}{2}$ col-
umns I.

FORMS OF DRILL BITS. P. C. M. & M.
Soc. S. A., vol. 8, p. 263, I.; p. 275.
Note

DESIGN OF BITS FOR POWER DRILLS
By E K Judd. E & M J, vol. 88,
p 1220 3½ columns. I.

THE DRESSING OF DRILL BITS. T.
Au I M E, vol 11, p 157 1 page.

DUNSTON'S DRILL SHARPENER. E &
M J., vol 85, p. 1048. 2 columns I.

SHARPENING DRILLS UNDERGROUND.
E & M J, vol. 87, p 767. 1½ col-
umns

CALCUMET AND HECLA DRILL-SHARPEN-
ING DEVICE By C L. C. Fitchtel.
E. & M J., vol 87, p 1073. 7 col-
umns I.

Use of Bore Holes

AN ARRANGEMENT FOR HOLING INTO
OLD WORKINGS. E. & M. J., vol. 88,
p. 213. 2 columns

See also DRAINAGE IN GENERAL

Prospect Drilling

PROSPECT DRILLING IN THE GLOBE-
KELVIN DISTRICT, ARIZONA. E. &
M J., vol. 89, p. 872. 3 columns. I.

PROSPECT DRILLING AT RAY, NEVADA.
M. & M., vol. 29, p. 545. 1 column.

DRILLING WITH AN AUGER BIT. E. &
M. J., vol 86, p. 1143. 1 column

DRILL USED IN PROSPECTING FOR COAL.
M. & M., vol. 30, p. 454. ½ column.
I

PROSPECT DRILLING IN THE JOPLIN
DISTRICT. By O. Ruhl. M. & M.,
vol. 29, p. 6. 3½ columns. I.

PROSPECTING WITH THE DIAMOND
DRILL. By B. Hunt. Min. & Sci.
Press, vol. 96, p. 257. 2½ columns.

See also DIAMOND AND ROTARY DRILLS,
and CHURN DRILLS AND DRILLING.

THE DRILL AS A MEANS OF TESTING
FOR GRAVEL. Min. & Sci. Press,
vol. 98, p. 721. 7 columns. I.

See also VALUE OF MINES, ETC.

OIL-WELL DRILLING IN CALIFORNIA.
By W. R. Jewell. Min. & Sci. Press,
vol. 101, p. 775. 3½ columns.

BRINGING IN A GUSHER. E. & M. J.,
vol 90, p. 807. 1½ columns. I.

PROSPECT DRILLING FOR OIL IN MEX-
ICO. Min. Mag., London, vol 3,
p. 283. 6 columns I.

DRILLING FOR OIL IN EASTERN ILLI-
NOIS By R S. Blatchley Min. &
Sci. Press, vol. 99, p 613 8½ col-
umns. I.

PROSPECTING FOR COAL: Boring. Min
Mag., vol. 7, p. 258, 7½ pages;
p. 463, 7½ pages.

See also PETROLEUM, ETC.

SEARCHING FOR COAL: Prospect Drill-
ing. Min Mag, vol 8, p. 322. 11
pages; vol. 7, p 463. 7½ pages.

UNDERGROUND BORING TO PROVE A
LOWER COAL SEAM. E. & M. J.,
vol. 86, p. 581 ½ column.

See also PROSPECTING, ETC.

DRILLING FOR PLACER EXAMINATION.
M. & M., vol. 29, p. 540. 5 columns.

See also AURIFEROUS GRAVELS.

TESTING DREDGEABLE GRAVELS. By
W. H. Radford. Min. & Sci. Press,
vol. 98, p 721. 7 columns. I.

DRILLING IN ALLUVIAL GROUND IN
ALASKA. By T A Rickard Min
& Sci. Press, vol 99, p. 558. 3½ col-
umns. I.

See also VALUE OF MINES.

WELL DRILLING MACHINES FOR COP-
PER PROSPECTING By W. G. Weber.
Min. & Sci. Press, vol 101, p. 14.
4½ columns

See also COST OF DRILLING AND BOR-
ING

Drill Records and Reports

DIAMOND DRILL RECORDS AT MOUNT
MORGAN E. & M. J., vol 89, p.
712. ½ column.

NEED OF COMPLETE RECORD OF PROS-
PECT DRILL HOLES. By H. C.
George. E. & M. J, vol 89, p. 528.
1½ columns.

A REMARKABLE DRILL CORE. M. &
M., vol 30, p. 727. 3 columns. I.

A CORE-DRILL HOLE OF UNUSUAL SIZE.
E. & M. J., vol 88, p. 1237. 1 col-
umn.

- DRILL CORE PROBLEMS.** By A. C. Lane. M. & M., vol. 30, p. 670. 2½ columns. I.
- A DIAMOND DRILL CORE SECTION OF THE MESABI ROCKS** By N. H. Winchell. T. L. S. M. I., vol. 14, p. 156, 22 pages; vol. 15, p. 100, 42 pages, I.
- RECORD OF BOREHOLE No 1 OF THE STANDARD COAL AND RAILWAY COMPANY, LIMITED, ABOUT ONE MILE NORTH OF HALFWAY RIVER LAKE, CUMBERLAND COUNTY, NOVA SCOTIA.** By R. H. Brown. J. M. Soc. N. S., vol. 10, p. 162. 6 pages.
- SAMPLING SLUDGE OF CHURN DRILLS** E. & M. J., vol. 90, p. 851. 1 column.
- INACCURACIES OF CHURN DRILL SAMPLING.** By H. A. Field. E. & M. J., vol. 89, p. 953. 1 column.
- See also **METHODS OF SAMPLING, ETC.**
- DIAMOND DRILL REPORTS.** E. & M. J., vol. 90, p. 1147. ½ column D.
- See also **DIAMOND AND ROTARY DRILLS AND CHURN DRILLS AND DRILLING.**
- CHURN DRILLING AT ELY, NEVADA.** M. & M., vol. 29, p. 81. ½ column.
- CHURN DRILLING IN ELY DISTRICT.** By J. L. Dobbins. M. & M., vol. 29, p. 526. 4 columns. I.
- DETAILS OF CHURN DRILL OPERATIONS AT SILVERBELL, ARIZONA.** By M. B. Gentry. E. & M. J., vol. 90, p. 850. 4½ columns. I.
- PROSPECTING WITH CHURN DRILLS AT MIAMI, ARIZONA.** By H. A. Field. E. & M. J., vol. 90, p. 804. 5 columns. D.
- See also **PROSPECT DRILLING.**
- CHURN DRILLING IN THE JOPLIN DISTRICT.** E. & M. J., vol. 89, p. 1150. 3 columns. I.
- UNDERGROUND PROSPECT DRILLING IN THE JOPLIN DISTRICT: CHURN DRILLING** By F. W. Sansom. E. & M. J., vol. 90, p. 157. ½ column.
- SUCCESSFUL PROSPECTING WITH CHURN DRILL UNDER UNFAVORABLE CONDITIONS** E. & M. J., vol. 87, p. 420. 3 columns.
- CHURN DRILL PROSPECTING IN THE JOPLIN DISTRICT.** By J. F. Haley. E. & M. J., vol. 89, p. 1150. 3 columns. I.
- THE CHURN-DRILL 'AS A MEANS FOR PROSPECTING.** By E. E. Carter. Min. & Sci. Press, vol. 96, p. 572. 1½ columns.
- CHURN DRILLING FOR BLASTING.** E. & M. J., vol. 88, p. 178. ¾ column.
- THE STEEL OIL DERRICK.** By R. B. Woodworth. P. E. Soc. W. Pa., vol. 25, p. 245. 67½ pages. I.
- STEEL DERRICKS AND DRILLING MACHINES.** Min. & Sci. Press, vol. 101, p. 259. 2 columns I.
- DEVELOPMENT AND DESIGN OF THE STEEL OIL DERRICK.** By R. B. Woodworth. E. & M. J., vol. 88, p. 304. 16½ columns I.
- See also **COST OF DRILLING AND BORING.**
- Churn Drills and Drilling**
- COMPLETE CHURN DRILL EQUIPMENT FOR PROSPECTING.** E. & M. J., vol. 90, p. 998. ½ column. Table.
- DRILLING WITH BAMBOO RODS.** By W. A. Moller. T. I. M. E., vol. 36, p. 437. 6 pages. I.
- STEAM CHURN DRILL IN HOT AND COLD CLIMATES.** By J. P. Hutchins. E. & M. J., vol. 86, p. 218. 9 columns. I.
- ELECTRICALLY-DRIVEN WELL-DRILLER.** By J. V. Downie. Min. & Sci. Press, vol. 99, p. 269. 2½ columns. I.
- NEW DEVELOPMENTS IN WELL BORING AND IRRIGATION IN EASTERN SOUTH DAKOTA.** By N. H. Darton. U. S. G. S., 18th Ann Rept, pt. 4, pp. 561-616, 1896-97. I.
- BORING. Prospect Work by Churn Drill.** Min. Mag., vol. 10, p. 451. 4½ pages.

Diamond and Rotary Drills

THE DIAMOND DRILL. Min. & Sci. Press, vol 20, p. 17. $\frac{1}{2}$ column.

THE DIAMOND POINTED DRILL. Min. & Sci. Press, vol. 20, p 296, 3 columns, I, p 311, 2 columns, I.

DIAMONDS FOR CUTTING AND DRILLING Min. & Sci. Press, vol. 22, p. 246. $\frac{1}{2}$ column.

WEAR OF DIAMONDS IN DRILLING VARIOUS ROCKS. E & M J., vol 89, p. 1100 $1\frac{1}{2}$ columns.

NOTE ON DIAMOND DRILLING. By C. M. Haight. Sch Mines Quart, vol 30, p. 98. $1\frac{1}{2}$ pages. I.

DIAMOND DRILLING NOTES IN KEWEE-NAW POINT. M. & M., vol. 31, p. 295 1 column.

THE DIAMOND CORE-DRILL IN PROSPECTING By L T. Wright Min. & Sci. Press, vol. 95, p. 461. $3\frac{1}{2}$ columns.

THE DIAMOND DRILL AT THE SMARTSVILLE TUNNEL. Min. & Sci. Press, vol. 22, p. 344. $1\frac{1}{2}$ columns.

DIAMOND DRILLING AT TONOPAH. By J. M. Fox. Min. & Sci. Press, vol 99, p. 262. $5\frac{1}{2}$ columns. I.

DIAMOND DRILLING AT THE GRANBY MINES J. C. M I., vol 11, p. 401. $\frac{1}{2}$ page.

THE DIAMOND DRILL IN THE ANTHRACITE FIELDS. By F. Lynde. E & M. J., vol. 88, p. 258. 9 columns. I.

PROSPECTING WITH DIAMOND DRILLS IN MEXICAN MINES. E. & M. J., vol. 86, p. 313. $1\frac{1}{2}$ columns.

NOTES ON DIAMOND DRILLING AT THE MICHIGAN COPPER MINE, ROCKLAND, MICHIGAN. By C. M. Haight. Sch. Mines Quart., vol. 30, p. 302. 6 pages. I.

DIAMOND DRILLING AT MAPINI. By J. F. Bennett. E. & M. J., vol. 85, p. 718. 3 columns. I.

DEEP DIAMOND-BORING AT BALFOUR MAINS, FIFESHIRE, GREAT BRITAIN. By J. G. Thompson. T. I. M. E., vol. 36, p. 574. 6 pages. I.

CALYX BORING BY THE VICTORIAN MINES DEPARTMENT By S Hunter. T. Au. I M E, vol 7, p. 46 3 pages I.

DIAMOND DRILL, CALYX AND HAND BORING BY THE VICTORIAN MINES DEPARTMENT. By S. Hunter. T. Au. I M. E., vol. 7, p. 23. 40 pages. I.

SOME NOTES ON "THE DAVIS CALYX DRILL." By Davis and Knapp. T. Au. I. M. E., vol. 3, p. 250. $5\frac{1}{2}$ pages. I.

USE OF THE TERRY CORE DRILL IN MINE OPERATIONS. E. & M. J., vol. 89, p. 1156. 6 columns. I.

DRILLING WITH ROTATED CASING. E & M J., vol. 86, p. 1142. $1\frac{1}{2}$ columns. I.

See also COST OF DRILLING AND BORING.

Deep Drilling

THE WORLD'S DEEPEST BORE-HOLE. P. C. M. & M. Soc. S A., vol. 7, p. 307. Note.

A DEEP DIAMOND DRILL HOLE. E. & M. J., vol. 87, p 791. $1\frac{1}{2}$ columns.

A DEEP BORING AT HESWELL, CHESHIRE, AND ITS BEARING UPON UNDERGROUND GEOLOGY OF THE LIVERPOOL-WIRRAL AREAS By A. Wade. T. I. M. E., vol. 39, p. 163. $23\frac{1}{2}$ pages. I.

RECORD OF DEEP-WELL DRILLING FOR 1904. By M. L. Fuller, E. F. Lines, and A. C. Veatch. U. S. G. S., Bull. 264, 106 pages, 1905; Bull. 298, 299 pages, 1906.

DEEP DIAMOND-BORING AT BALFOUR MAINS, FIFESHIRE, GREAT BRITAIN. By J. G. Thompson. T. I. M. E., vol. 36, p. 574. 6 pages. I.

Rate of Drilling

THE SOUTH AFRICAN STOPE-DRILL COMPETITION. By E. M. Weston. E. & M. J., vol. 85, p. 492. 10 columns. I.

188 INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

TRANSVAAL DRILL COMPETITION, 1909. M. & M., vol. 31, p. 459 6½ columns. I

RATE OF DRILLING AT GOLDFIELD, NEVADA. E. & M. J., vol. 90, p. 1246. ¾ column

RATE OF DRILLING WITH MACHINE DRILL P. C. M. & M. Soc. S. A., vol. 8, p. 272 6 columns.

DRILL CONTEST ON THE RAND. Min. & Sci. Press, vol. 96, p. 361. 3 columns. I

SURFACE TRIALS IN RAND STOPE DRILL COMPETITION. By E. M. Weston. E. & M. J., vol. 87, p. 998. 6½ columns.

RATE OF DRILLING WITH WELL DRILLING OUTFIT FOR COPPER PROSPECTING Min. & Sci. Press, vol. 101, p. 14. Table.

RATE OF DRILLING WITH DIAMOND DRILL IN VARIOUS FORMATIONS. Min. & Sci. Press, vol. 95, p. 461. Table.

Submarine Drilling

RECENT IMPROVEMENTS IN SUBMARINE DRILLING. E. & M. J., vol. 35, p. 31. 1 column.

Surveying Bore Holes

DEFLECTION OF BOREHOLES IN DIAMOND DRILLING. P. C. M. & M. Soc. S. A., vol. 7, p. 380. ½ column.

DEVIATION OF BORE-HOLES. By J. Kitchin Min. & Sci. Press, vol. 96, p. 462. 6 columns. I.

THE DEVIATION OF RAND BORE-HOLES FROM THE VERTICAL. By Joseph Kitchin. T. I. M. & M., vol. 17, p. 87 50 pages. I.

CROOKED HOLES WITH CHURN DRILLS. E. & M. J., vol. 90, p. 851. ½ column

See also CHURN DRILLS AND DRILLING. APPARATUS FOR SURVEYING A BORE-HOLE. E. & M. J., vol. 87, p. 854. 2 columns. I.

SURVEYING DIAMOND DRILL HOLES. Sch. Mines Quart., vol. 30, p. 305. 3 pages. I.

CONTROLLING THE CURVATURE OF DIAMOND DRILL HOLES By E. E. White. E. & M. J., vol. 90, p. 546. 3 columns. D.

See also DIAMOND AND ROTARY DRILLS.

DIAMOND-DRILL TEST TUBES By J. E. Jopling. M. & M., vol. 30, p. 635. 3 columns. I.

CAPILLARY ATTRACTION IN DIAMOND DRILL TEST TUBES. By J. E. Jopling. E. & M. J., vol. 89, p. 423. 3 columns. I.

CAPILLARY ATTRACTION IN DIAMOND DRILL TEST TUBES. By J. E. Jopling. T. L. S. M. I., vol. 14, p. 131. 10 pages I

DETERMINING DEPTH OF WATER IN BORE HOLES. E. & M. J., vol. 85, p. 607. ½ column.

Reamers for Boring Apparatus

See first volume of Index.

THE INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

Economic and Industrial Features of Mining

ECONOMY IN MINING OPERATIONS. By T. E. Lambert. Min. & Sci. Press, vol. 95, p. 341. 6 columns. I.

ON THE ECONOMICS OF MINING. By J. R. Godfrey. T. Au. I. M. E., vol. 5, p. 143. 14 pages.

MEXICAN NOTES: Economic Advancement. By M. R. Lamb. Min. & Sci. Press, vol. 96, p. 702, 5 columns, I.; p. 736, 4 columns, I.

See also MEXICO.

STATUS OF MINING AND SMELTING IN COLORADO. By F. Guterman. E. & M. J., vol. 90, p. 1009. 6 columns.

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. T. A. I. M. E., vol. 39, p. 211. 12½ pages.

See also AFRICA.

MINING INDUSTRY IN 1907. By A. H. Brooks. U. S. G. S., Bull. 345, p. 30 24 pages. 1907.

MODERN PROGRESS IN MINING AND METALLURGY IN THE WESTERN UNITED STATES. By D. W. Brunton. Min. & Sci. Press, vol. 99, p. 453. 12 columns.

ARE WE PROGRESSING? By S. A. Worcester. Min & Sci Press, vol. 99, p. 856. 2½ columns.

LAKE SUPERIOR IRON MINES IN 1907. By D. E. Woodbridge E. & M. J., vol. 85, p. 113. 9 columns

See also OCCURRENCES OF IRON ORES.

THE EXPLORATION OF OUR MINERAL RESOURCES. By R. W. Brock. J. M. Soc. N. S., vol. 13, p. 125. 12 pages

MINING, QUARRYING, AND METALLURGICAL PROCESSES AND PRODUCTS. By H. T. De La Bache. Min. Mag., vol. 1, p. 331. 17 pages.

THE METALLIC WEALTH OF THE UNITED STATES Min. Mag., vol. 3, p. 281. 5 pages.

HOW IT STRIKES AN AMERICAN. By T. L. Carter. Min. & Sci. Press, vol. 98, p. 447. 7½ columns, I; p. 481, 7½ columns.

REQUIRED A NEW PAIR OF GLASSES. By F. C. Keighley. E. & M. J., vol. 89, p. 12. 5½ columns.

MINING: Its Embarrassments and Its Results. Min. Mag., vol. 2, p. 636. 5 pages.

THE INFLUENCE OF THE RAILROADS OF THE UNITED STATES AND CANADA ON THE MINERAL INDUSTRY. By J. Douglas T. I. M. & M., vol. 19, p. 2. 55 pages.

See also TRANSPORTATION.

RELATION BETWEEN MINERAL AND CHEMICAL INDUSTRIES. By G. T. Holloway. Min. & Sci. Press, vol.

100, p. 424, 8½ columns; p. 450, 5½ columns.

See also CHEMISTRY: Methods and Practice.

DIRECT AND COLLATERAL RELATIONS OF MINING: The Philosophy of the American Railroad System. By R. G. Rankin. Min. Mag., vol. 10, p. 8, 4½ pages; p. 98, 8 pages; p. 263, 4½ pages; p. 338, 6 pages.

EMPIRE BUILDING IN WESTERN MEXICO. By P. E. Barbour E. & M. J., vol. 85, p. 694 10½ columns. I.

THE PRICE AT WHICH PROFITS VANISH. By J. R. Finlay. E. & M. J., vol. 85, p. 165. 2½ columns.

PROFIT PER ACRE. E. & M. J., vol. 89, p. 13. 2 columns

See also VALUE OF MINES.

THE MINE AND THE FARM. By R. Drummond. J. M. Soc. N. S., vol. 14, p. 15. 14 pages.

THE MINES AND AGRICULTURE OF ROMAN BRITAIN. By A. Del Mar. Min. & Sci. Press, vol. 95, p. 28. 2½ columns.

Mining Statistics

See first volume of Index

The Development and Production of Precious Metal Mining

THE HISTORY OF GOLD AND SILVER. By J. W. Malcolmson. Min. & Sci. Press, vol. 95, p. 784. 5½ columns.

PRESENT STATUS OF THE GOLD MINING INDUSTRY. By J. H. Curle. Min. & Sci. Press, vol. 95, p. 147. 6½ columns. I.

GOLD MINING AND THE HISTORY OF CIVILIZATION. By F. L. Garrison. E. & M. J., vol. 85, p. 1094. 12 columns.

FACTORS IN SUCCESSFUL GOLD MINING. By A. Del Mar. Min. & Sci. Press, vol. 99, p. 587. 2½ columns.

A CONTRIBUTION TO THE QUESTION OF PRICES. By W. R. Ingalls. E. & M. J., vol. 89, p. 1011. 15 columns.

190 INDUSTRIAL DEVELOPMENT OF MINING AND PRODUCTION

DISPOSAL OF GOLD FROM THE RAND. By T. K. Rose. Min. & Sci. Press, vol. 98, p. 560. 4½ columns.

PRESENT POSITION OF AUSTRALIA AND ITS GOLD MINES. By W. Westgrath. Min. Mag., vol. 9, p. 433. 4 pages.

GOLD AND SILVER PRODUCED BY THE MINES OF AMERICA FROM 1492 TO 1848. Min. Mag., vol. 1, p. 219, 9½ pages, p. 365, 12 pages, 1

SILVER PRICES IN 1909. By T. T. Van Wagenen. Min. & Sci. Press, vol. 98, p. 54. 4 columns D.

ACTUAL EARNING POWER OF THE RAND MINES. By G. A. Denny E. & M. J., vol. 85, p. 593. 6 columns.

THE COMMERCIAL ASPECT OF RAND "PROFITS." By G. A. Denny. E. & M. J., vol. 85, p. 446. 7½ columns.

THE WORLD'S GOLD PRODUCTION. By T. A. Rickard. Min. Mag., London, vol. 2, p. 455. 5½ columns.

GOLD PRODUCTION AND ITS EFFECTS. By T. L. Garrison. Min. & Sci. Press, vol. 96, p. 268. 1½ columns.

PRODUCTION OF PRECIOUS METALS IN THE UNITED STATES. By C. King. U. S. G. S., 2d Ann Rept., pp. 331-401. 1880-81 I

GOLD AND SILVER PRODUCTION IN THE UNITED STATES. Min. & Sci. Press, vol. 98, p. 9. 2 columns. Table.

A GEOLOGICAL ANALYSIS OF THE SILVER PRODUCTION OF THE UNITED STATES IN 1906. By W. Lindgren. U. S. G. S., Bull. 340, p. 23. 11 pages. 1907.

YIELD OF THE COMSTOCK MINES. Min. & Sci. Press, vol. 22, p. 296. ¼ column.

See also **COST OF PRODUCTION OF VARIOUS MATERIALS.**

The Function of Gold and Silver

ON THE DECLINE IN THE VALUE OF THE PRECIOUS METALS. Min. Mag., vol. 9, p. 525. 3½ pages.

"DEPRECIATION OF GOLD." By J. P. Norton. E. & M. J., vol. 84, p. 446. 3½ columns.

HAS THE VALUE OF GOLD DEPRECIATED? By W. R. Ingalls. E. & M. J., vol. 86, p. 1037. 18 columns. D.

THE DISTRIBUTION OF THE GOLD PRODUCED ON THE RAND. By T. K. Rose P. C. M. & M. Soc. S. A., vol. 9, p. 265. 8 columns.

THE GOLD AND SILVER QUESTION By T. Cornish. T. Au. I. M. E., vol. 2, p. 51. 6 pages.

THE MARKET PRICE AND GOLD PRODUCTION E. & M. J., vol. 85, p. 1303 3 columns. D.

THE SILVER MOVEMENT IN 1907. E. & M. J., vol. 85, p. 302 2 columns.

A RUSSIAN MONEY TRUST. By G. E. Walsh. Min. & Sci. Press, vol. 99, p. 195. 2½ columns.

See also **OCCURRENCE OF PLATINUM.**

Conservation

CONSERVATION OF NATURAL RESOURCES By J. Douglas E. & M. J., vol. 87, p. 1202. 11 columns.

THE CONSERVATION MOVEMENT By C. W. Hayes. Min. & Sci. Press, vol. 101, p. 664. 9½ columns.

CONSERVATION AND SOME DIFFICULTIES. By H. V. Winchell. Min. & Sci. Press, vol. 99, p. 819. 2½ columns.

CHEMISTRY AND THE CONSERVATION OF OUR FORESTS AND MINERALS. By M. T. Bogert. Sch. Mines Quart., vol. 30, p. 217. 21½ pages.

See also **CHEMISTRY.**

CONSERVATION OF IRON ORE AND COAL RESOURCES. P. C. M. & M. Soc. S. A., vol. 9, p. 248 2 columns.

WASTE OF OUR FUEL RESOURCES. By I. C. White. M. & M., vol. 29, p. 41. 6½ columns. I.

CONSERVATION AND ALASKAN COAL. By H. F. Bain. Min. & Sci. Press, vol. 100, p. 185. 7½ columns. Map.

CONSERVATION AS IT AFFECTS COAL LANDS. By E. W. Parker. Min. & Sci. Press, vol. 101, p. 469. 3½ columns.

THE WASTE OF MINERAL FUEL RESOURCES. By I. C. White. E. & M. J., vol. 85, p. 1139. 7 columns.

THE CONSERVATION OF COAL IN THE UNITED STATES. By E. W. Parker. T. A. I. M. E., vol. 40, p. 596, 7½ pages; Discussion, p. 901, 5 pages.

CONSERVATION OF COAL IN SOUTH AFRICA. P. C. M. & M. Soc. S. A., vol. 9, p. 333. ½ column.

PAPERS ON THE CONSERVATION OF MINERAL RESOURCES. U. S. G. S., Bull. 395, 214 pages. I. 1909.

PRESIDENT TAFT ON CONSERVATION OF MINERAL LANDS. E. & M. J., vol. 90, p. 495. 6½ columns.

CONSERVATION OF ORES AND MINERALS. By Andrew Carnegie. E. & M. J., vol. 85, p. 1051. 7 columns.

THE AMERICAN INSTITUTE OF MINING ENGINEERS AND THE CONSERVATION OF NATURAL RESOURCES. By J. Birkinbine. T. A. I. M. E., vol. 40, p. 412. 7 pages.

CONSERVATION OF NATURAL RESOURCES. By J. Douglas. T. A. I. M. E., vol. 40, p. 419. 13½ pages; Discussion, p. 878. 2½ pages.

CONSERVATION AND INLAND WATERWAYS. By E. P. North. Min. & Sci. Press, vol. 100, p. 225. 4 columns.

THE CONSERVATION OF THE FORESTS AND WATER POWERS OF WISCONSIN. By E. M. Griffiths. J. W. Soc. E., vol. 13, p. 617. 14 pages. I.

THE CONSERVATION OF OUR FORESTS IN RELATION TO THE DEVELOPMENT OF OUR METAL MINES. By E. P. Brown. J. M. Soc. N. S., vol. 14, p. 31. 5½ pages.

"CONCRETE LUMBER" AND FOREST PRESERVATION. E. & M. J., vol. 87, p. 421. ½ column.

See also CONCRETE and USE OF CONCRETE IN MINES.

See also DREDGING FOR GOLD AND OTHER MATERIALS, and WASTE IN MINING.

See also SOURCES AND SUPPLIES OF WATER.

The Copper Trade

THE FUTURE OF COPPER. By J. T. Morrow. E. & M. J., vol. 85, p. 412. 4 columns. D.

COPPER INDUSTRY. By C. Kirchoff, Jr. U. S. G. S., Mineral Resources 1883 and 1884, vol. 14.

THE COPPER SITUATION. By James Douglas. Min. & Sci. Press, vol. 95, p. 526. 4 columns.

THE ACTUAL SITUATION OF COPPER, 1908. By J. Douglas. Min. & Sci. Press, vol. 96, p. 7. 1½ columns.

VISIT TO THE LAKE SUPERIOR REGION. By E. Rivot. Min. Mag., vol. 6, p. 28, 8½ pages; p. 99, 8 pages; p. 207, 4 pages; p. 414, 3 pages.

METHODS OF COPPER MINING. By H. L. Hancock. Min. & Sci. Press, vol. 98, p. 730. 2½ columns.

THE WORK OF THE TENNESSEE COPPER COMPANY. By K. R. Morgan. Min. & Sci. Press, vol. 101, p. 675. 5½ columns.

DIAGRAM OF COPPER PRICES. E. & M. J., vol. 89, p. 560. 1 column. D.

THE PRODUCTION OF COPPER. By L. C. Groton. Min. & Sci. Press, vol. 96, p. 102. 1½ columns.

COPPER THROUGH FIFTY YEARS: Production. By J. Douglas. Min. & Sci. Press, vol. 100, p. 727. 6 columns.

LAKE SUPERIOR COPPER MINING IN 1909: Production. By R. H. Maurer. Min. & Sci. Press, vol. 100, p. 22. 8½ columns. I.

COPPER IN 1909: Production, etc. By L. Vogelstein. Min. & Sci. Press, vol. 100, p. 9. 5 columns. D.

See also OCCURRENCES OF COPPER AND COPPER ORES.

See also METALLURGY OF COPPER.

See also COST OF PRODUCING VARIOUS MATERIALS.

The Iron Trade

HISTORY OF THE ENGLISH IRON TRADE SINCE 1830. Min. Mag., vol 5, p. 312. 8½ pages.

IRON TRADE OF SWEDEN AND NORWAY. By H. Scriviner. Min. Mag., vol 3, p. 505. 8 pages.

THE IRON ORE SITUATION IN NOVA SCOTIA. By J. E. Woodman. J. M. Soc. N. S., vol. 10, p. 133. 14 pages.

IRON ORE RESERVES. E. & M. J., vol 88, p. 117. 1 column.

PRODUCTION AND CONSUMPTION OF THE CLINTON IRON-ORES OF ALABAMA. T. A. I. M. E., vol. 40, p. 132. 2 pages.

AMERICAN IRON TRADE FROM 1619 TO 1886. By J. M. Swank. U. S. G. S., Mineral Resources, 1886, vol. 8. 12 pages.

LAKE SUPERIOR IRON ORE SHIPMENTS. E. & M. J., vol 89, p. 706. 1½ columns.

PRICES OF LAKE IRON ORE FROM 1891 TO 1910. E. & M. J., vol. 89, p. 467. ¾ column.

PRICES OF LAKE ORES: 1857 to 1883. E. & M. J., vol. 87, p. 854. ¼ column.

ECONOMIES OF STEEL PRICES. E. & M. J., vol. 87, p. 461. 1½ columns.

See also OCCURRENCE OF IRON ORES.

See also METALLURGY OF IRON AND STEEL.

See also IRON BLAST FURNACES, ETC., also COST OF PRODUCING VARIOUS MATERIALS.

The Coal Trade

RECIPROCITY IN COAL. By W. C. Milner. J. M. Soc. N. S., vol. 10, p. 148. 12 pages.

COAL AND IRON PRODUCTION OF THE UNITED STATES. Min. Mag., vol. 10, p. 39. 12½ pages.

A SUGGESTION TO THE COAL MINING INDUSTRY. By T. B. Bancroft. E. & M. J., vol 89, p. 925. 7½ columns.

PROBLEMS CONFRONTING THE COAL INDUSTRY. By S. A. Taylor. E. & M. J., vol. 89, p. 476. 5½ columns.

PROBLEMS IN THE COAL INDUSTRY. M & M., vol. 30, p. 689. 2 columns.

CONDITIONS AFFECTING THE COAL-MINING INDUSTRY. By E. W. Parker. E. & M. J., vol. 89, p. 576. 5½ columns.

VITAL FACTS PERTAINING TO COAL MINING. By F. W. Parsons. E. & M. J., vol. 90, p. 128. 13 columns.

ALABAMA OPERATORS DISCUSS COAL PROBLEMS. E. & M. J., vol. 90, p. 326. 11½ columns.

FACTS CONCERNING PRESENT FUEL SITUATION. By F. W. Parsons. E. & M. J., vol. 90, p. 773. 6 columns. I.

A REPORT ON THE ECONOMIC VALUE OF THE SEMI-BITUMINOUS COAL OF THE CUMBERLAND COAL BASIN. By R. J. Rankin. Min. Mag., vol. 4, p. 47, 12 pages, I.; p. 141, 10½ pages; p. 219, 20 pages, I.

MINING COAL. By L. C. Moore. P. E. Soc. W. Pa., vol. 23, p. 241. 18 pages.

THE ANTHRACITE TRUST DECISION. E. & M. J., vol. 90, p. 1199. 2½ columns.

REMOVAL OF THE COAL DUTY. By F. A. Hill. M. & M., vol 29, p. 359. 1 column.

THE FUTURE SUPPLY OF ANTHRACITE COAL. By R. Lee. Coal Mining Supplement, E. & M. J., vol. 88, p. 5. 8½ columns. I.

See also OCCURRENCE OF COAL, and COST OF PRODUCING VARIOUS MATERIALS.

Miscellaneous Production

MINERAL AND METAL PRODUCTION IN 1907 E. & M. J., vol. 85, p. 1. 3 columns.

MINERAL AND METAL PRODUCTION IN 1908 E. & M. J., vol. 87, p. 51. 3 columns.

ORE SHIPMENTS. Min. & Sci. Press, vol. 22, p. 216. 2 columns.

PRODUCTION OF ARIZONA MINES IN 1907. E. & M. J., vol. 86, p. 422. 3½ columns.

See also ARIZONA.

ORE RECEIPTS AND SHIPMENTS AT LAKE PORTS M. & M., vol. 29, p. 44. ½ column. Map and D.

DIAMOND PRODUCTION IN SOUTH AFRICA. E. & M. J., vol. 86, p. 1148. ½ column.

See also AFRICA.

REVIEW OF PROGRESS IN THE MINERAL PRODUCTION OF BRITISH COLUMBIA. By E. Jacobs. J. C. M. I., vol. 10, p. 183. 5 pages.

See also BRITISH COLUMBIA.

MINERAL PRODUCTION OF BRITISH COLUMBIA. By E. Jacobs. E. & M. J., vol. 85, p. 1291. 6½ columns.

MINERAL PRODUCTION OF BRITISH COLUMBIA IN 1907. By E. Jacobs. J. C. M. I., vol. 11, p. 452. 7 pages.

MINERAL PRODUCTION OF BRITISH COLUMBIA IN 1908. By E. Jacobs. E. & M. J., vol. 87, p. 247. 12½ columns.

MINERAL PRODUCTION OF BRITISH COLUMBIA IN 1909. J. C. M. I., vol. 13, p. 56. 3 pages.

MINERAL PRODUCTION OF CALIFORNIA IN 1907. E. & M. J., vol. 86, p. 731. 3 columns.

See also CALIFORNIA.

MINERAL PRODUCTION OF CANADA. E. & M. J., vol. 85, p. 598. 9 columns.

MINERAL PRODUCTION OF CANADA IN 1909. By J. McLeish. E. & M. J., vol. 89, p. 607. 8½ columns.

See also CANADA.

MINERAL PRODUCTION OF CHINA IN 1907. By T. T. Read. E. & M. J., vol. 85, p. 1296. 8 columns.

See also CHINA.

MINERAL PRODUCTION OF CHILE IN 1908 AND 1909. By F. A. Sundt. Min. & Sci. Press, vol. 100, p. 802. 1½ columns.

See also CHILE.

MINERAL PRODUCTION OF IDAHO FOR 1909. By F. C. Moore. E. & M. J., vol. 89, p. 527. 4 columns.

See also IDAHO.

PRODUCTION OF THE VARIOUS METALS IN KENTUCKY DURING 1908. By C. J. Norwood. E. & M. J., vol. 87, p. 1250. 5½ columns.

See also KENTUCKY.

THE MINERAL PRODUCTION OF MARYLAND IN 1908. By W. B. Clark. E. & M. J., vol. 87, p. 903. 2½ columns.

MARYLAND'S MINERAL PRODUCTION. By W. B. Clark. E. & M. J., vol. 85, p. 807. 2 columns.

See also MARYLAND.

EARLY PRODUCTION OF THE JOPLIN LEAD AND ZINC DISTRICT E. & M. J., vol. 85, p. 561. ½ column.

ECONOMIC CONDITIONS IN THE JOPLIN DISTRICT. By T. L. Carter. E. & M. J., vol. 90, p. 759. 7½ columns. I.

JOPLIN ZINC AND LEAD PRODUCTION FOR 1910. By L. L. Wittich. M. & M., vol. 31, p. 435. 1 column. Table.

See also MISSOURI.

PRODUCTION AND CONSUMPTION OF ZINC IN 1907. By W. R. Ingalls. E. & M. J., vol. 85, p. 1183. 12 columns. I.

LEAD IN 1909: Production, etc. By J. H. Lang. Min. & Sci. Press, vol. 100, p. 11. 1½ columns.

WESTERN LEAD PRODUCERS' ASSOCIATION. By L. A. Palmer. M. & M., vol. 29, p. 440. 2½ columns.

See also OCCURRENCE OF LEAD AND ZINC ORES.

PETROLEUM PRODUCTION. Min. & Sci. Press, vol 100, p. 84. 2 columns. D.

See also PETROLEUM.

TIN IN 1909. Production, etc. By H. W. Turner. Min & Sci. Press, vol 100, p. 61. 4 columns.

See also OCCURRENCE OF TIN.

DUMPING DEVICES

Dumps, Cradles, Tipples, Etc.

THE REED AUTOMATIC CAR FEEDER. M. & M., vol 29, p 256. 1½ columns. I.

DUMP CAR RIGHTER. By F. A. Kennedy. E. & M. J., vol 89, p. 600. 1 column. I.

STEAM RAM FOR DUMPING ORE CARS. E. & M. J., vol 89, p. 304. 1½ columns. I.

AN AUTOMATIC DUMP. End Dump. By G. C. Stoltz. E. & M. J., vol 90, p. 1295. 1 column. I.

A REMARKABLE CAR-DUMP. By F. A. Ross. E. & M. J., vol 86, p 754. 3½ columns. I.

THE RIGG BALANCE TIP. T. I. M. E., vol 36, p 635. ½ page. I.

A NOVEL CAR DUMPER. E. & M. J., vol 88, p 1238. 1½ columns. I.

A NEW ROOK-DUMPING DEVICE. By B. Lloyd. M. & M., vol 30, p. 592. 1½ columns. I.

SELF-DUMPING CAR HAULS. M. & M., vol 31, p. 536. 4 columns. I.

TRAM CAR TIPPLE. By G. C. Stoltz. E. & M. J., vol 89, p. 907. 1 column. I.

SELF-ACTING TIPPLE: End Dumper. E. & M. J., vol 88, p. 1132. ½ column. I.

JEFFREY-GRIFFITH CROSS-OVER DUMP. M. & M., vol 31, p. 622. 1½ columns. I.

CRADLE FOR DUMPING MINE-CARS. By S. S. Clarke. Min. & Sci. Press, vol 101, p. 803. 1 column. I.

See also HANDLING AND STORING MINERAL.

Rotary Dumps

REVOLVING TIPPLE. E. & M. J., vol 88, p. 793. 1 column. I.

REVOLVING CAR DUMPS. M. & M., vol 29, p. 413. ¾ column. I.

AUTOMATIC TRIP FOR ORE CARS. E. & M. J., vol 88, p. 1185. 1 column. I.

DUMPING WASTE WITH A LOCOMOTIVE TRAIN. By A. B. Foote. E. & M. J., vol 86, p. 711. 1½ columns. I.

See also DUMPS, CRADLE, TIPPLES, Etc.

Self-Dumping Cages

See first volume of Index.

Skip Dumps

TYPES OF SKIP DUMPS IN NEW YORK IRON MINES. By G. C. Stoltz. E. & M. J., vol 90, p. 1148. 3 columns. I.

ARRANGEMENT OF SELF-DUMPING UNDERGROUND SKIP. E. & M. J., vol 89, p 553. 1 column. I.

SIDE (ROTARY) DUMPING BUCKET SKIP. E. & M. J., vol 88, p. 131. ½ column. I.

THE ORIGINAL CONSOLIDATED SELF-DUMPING SKIP. E. & M. J., vol 90, p. 58. 3 columns. I.

See also SKIPS FOR RAISING MINERAL.

Bucket Dumps

AN AUTOMATIC BUCKET DUMP. By F. G. D. Smith. E. & M. J., vol 90, p. 106. 2 columns. I.

A BUCKET-DUMPING DEVICE. E. & M. J., vol 85, p. 1142. 2 columns. I.

BUCKET DUMPING DEVICE. By C. N. Nelson. E. & M. J., vol. 89, p. 1004. $\frac{1}{2}$ column. I.

ARRANGEMENT FOR DUMPING BUCKETS. By H. N. Herrick. Min. & Sci. Press, vol. 95, p. 533. $2\frac{1}{2}$ columns. I.

BUCKET DUMPING DEVICE. By H. F. Lunt. E. & M. J., vol. 89, p. 158. 1 column. I.

BUCKET DUMPS. E. & M. J., vol. 89, p. 552. 3 columns. I.

SELF-DUMPING BUCKET FOR WINZE. By L. May. E. & M. J., vol. 89, p. 760. 2 columns. I.

AN AUTOMATIC BUCKET TRIPPING DEVICE. E. & M. J., vol. 88, p. 328. $\frac{1}{2}$ column. I.

See also **HOISTING BUCKETS, METHODS OF DUMPING, ETC.**

TECHNICAL EDUCATION

General

POINTS ON PATENTS. By G. G. Turri. T. A. I. M. E., vol. 7, p. 148. 18 pages.

ERRORS IN THE WORLD'S PATENT LAWS. By G. G. Turri. T. A. I. M. E., vol. 2, p. 117. 14 pages.

SECRECY IN THE ARTS. By J. Douglas. T. A. I. M. E., vol. 38, p. 455. 18 pages.

SECRECY IN THE ARTS: Discussion of the paper of J. Douglas, Trans., vol. 38, p. 455. T. A. I. M. E., vol. 39, p. 797. $2\frac{1}{2}$ pages.

Indexes, Textbooks, Bibliographies, Etc.

THE USE OF INDEXES. By R. W. Raymond. Min. & Sci. Press, vol. 95, p. 239. $3\frac{1}{2}$ columns.

BIBLIOGRAPHY AND INDEX OF NORTH AMERICAN GEOLOGY, PALEONTOLOGY, PETROLOGY, AND MINERALOGY FOR 1892 AND 1893. By F. B. Weeks. U. S. G. S., Bull. 130, 210 pages, 1896; Bull. 135, 141 pages, 1896; Bull. 146, 130 pages, 1896; Bull. 149, 152 pages, 1897; Bull. 156, 130 pages, 1898; Bull. 162, 163 pages, 1899; Bull. 172, 141 pages, 1900; Bull. 188, 717 pages, 1902; Bull. 203, 144 pages, 1902; Bull. 221, 200 pages, 1903; Bull. 240, 243 pages, 1904; Bull. 271, 218 pages, 1905; Bull. 301, 770 pages, 1906.

CATALOGUE AND INDEX OF THE PUBLICATIONS OF THE UNITED STATES GEOLOGICAL SURVEY, 1880-1901. By P. C. Warman. U. S. G. S., Bull. 177, 858 pages, 1901; Bull. 215, 234 pages, 1903; Bull. 222, 208 pages, 1904.

BIBLIOGRAPHY AND INDEX OF THE PUBLICATIONS OF THE U. S. GEOLOGICAL SURVEY, 1879-1882. By P. C. Warman. U. S. G. S., Bull. 100, 495 pages. 1893.

CATALOGUE AND INDEX OF CONTRIBUTIONS TO NORTH AMERICAN GEOLOGY, 1732-1891. By N. H. Darton. U. S. G. S., Bull. 127, 1045 pages, 1896; Bull. 189, 337 pages, 1902.

BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1906 AND 1907. By F. B. Weeks and J. M. Nickels. U. S. G. S., Bull. 372, 317 pages. 1909.

See also **GEOLOGIC PROGRESS AND STUDIES.**

INDUSTRIAL CATALOGUE LIBRARY. By J. G. D. Mack. P. Soc. P. E. E., vol. 12, p. 84. 15 pages.

A CALCULATION BLUNDER COMMON TO MANY TEXTBOOKS ON TRIGONOMETRY USED IN ENGINEERING COLLEGES. By R. D. Bohannon. P. Soc. P. E. E., vol. 15, p. 655. 8 pages. I.

METHODS OF STUDYING CURRENT TECHNICAL LITERATURE. By H. H. Norris. P. Soc. P. E. E., vol. 15, p. 176. 3 pages.

BASIC PRINCIPLES IN THE CONSTRUCTION OF A TEXTBOOK. By S. E. Slocum. P. Soc. P. E. E., vol. 15, p. 168. 8 pages.

REPORT OF COMMITTEE ON TECHNICAL BOOKS FOR LIBRARIES. P. Soc. P. E. E., vol. 11, p. 58. 34 pages.

REPORT OF COMMITTEE ON TECHNICAL BOOKS FOR LIBRARIES. P. Soc. P. E. E., vol. 12, p. 193. 3 pages.

REPORT OF COMMITTEE ON TECHNICAL BOOKS FOR LIBRARIES. By C. F. Burgess. P. Soc. P. E. E., vol. 14, p. 35. 59 pages.

THE PREPARATION OF ENGINEERING TEXTBOOKS. By E. H. Powell. P. Soc. P. E. E., vol. 12, p. 196. 13 pages.

UNIVERSITY EXTENSION: An Instrument of the State in Its Upbuilding. By L. E. Reber. P. Soc. P. E. E., vol. 17, p. 105. 16 pages.

The Scope of Technical Education

ASTRONOMY FOR ENGINEERS. By C. S. Howe. P. Soc. P. E. E., vol. 11, p. 141. 8 pages.

TWO KINDS OF SPECIALIZATION AND FUNDAMENTAL PRINCIPLES IN PLACE AND OUT OF PLACE. By A. L. Williston. P. Soc. P. E. E., vol. 11, p. 127. 14 pages.

HOW FAR IS PURE THERMODYNAMICS OF VALUE IN PREPARING STUDENTS FOR HANDLING MECHANICAL ENGINEERING PROBLEMS. By A. J. Wood. P. Soc. P. E. E., vol. 16, p. 238. 10 pages.

ON ENTROPY. By W. D. Ennis. P. Soc. P. E. E., vol. 16, p. 249. 9 pages.

THE BENEFIT OF PHILOSOPHY TO THE ENGINEERING STUDENT. By B. Jones, Jr. P. Soc. P. E. E., vol. 14, p. 97. 29 pages.

THE RELATION OF PHILOSOPHY TO SCIENCE. By B. Jones. P. Soc. P. E. E., vol. 15, p. 26. 32 pages.

SOME CLASSROOM EXPERIMENTS IN MECHANICS. By J. E. Boyd. P. Soc. P. E. E., vol. 15, p. 524. 9 pages. I.

THE TEACHING OF ELEMENTARY MECHANICS. By W. S. Franklin and B. Macnutt. P. Soc. P. E. E., vol. 15, p. 316. 42 pages.

THE TEACHING OF APPLIED MECHANICS TO ENGINEERING STUDENTS. By W. Rautenstrauch. P. Soc. P. E. E., vol. 15, p. 537. 12 pages.

AN ELEMENTARY COURSE IN PROPERTIES OF MATERIALS. By G. I. Christenson. P. Soc. P. E. E., vol. 13, p. 279. 26 pages. I.

SOME QUESTIONS RELATING TO THE COURSE IN MECHANICS. By E. R. Maurer. P. Soc. P. E. E., vol. 15, p. 533. 4 pages.

A COURSE IN PHYSICS FOR ENGINEERING STUDENTS. By W. S. Franklin. P. Soc. P. E. E., vol. 15, p. 308. 7 pages.

THE TEACHING OF PHYSICS TO ENGINEERING STUDENTS. By W. S. Franklin. P. Soc. P. E. E., vol. 11, p. 261. 13 pages.

A COURSE IN MINE SURVEYING. By F. W. Sperr. P. Soc. P. E. E., vol. 13, p. 59. 4 pages.

THE TEACHING OF ELEMENTARY MACHINE DESIGN. By J. D. Hoffman. P. Soc. P. E. E., vol. 15, p. 586. 13 pages. I.

THE IMPROVEMENT OF THE FRESHMAN YEAR OF MATHEMATICS INSTRUCTION IN TECHNICAL SCHOOLS. By C. S. Slichter. P. Soc. P. E. E., vol. 14, p. 146. 16 pages.

ON TEACHING CALCULUS TO ENGINEERING STUDENTS. By A. M. Kenyon. P. Soc. P. E. E., vol. 12, p. 221, 5 pages; by B. F. Groat, p. 226, 4 pages.

THE JUSTIFICATION OF THE USE OF THE EXPRESSION "ENGINEERING MATHEMATICS." By A. E. Haynes. P. Soc. P. E. E., vol. 14, p. 127. 12 pages.

- THE TEACHING OF MATHEMATICS TO ENGINEERING STUDENTS** P. Soc. P. E. E., vol. 17, p. 39. 18 pages.
- SOME HINTS ON TEACHING MATHEMATICS TO ENGINEERING STUDENTS.** By F. Cajori P. Soc. P. E. E., vol. 13, p. 26. 9 pages.
- A NEGLECTED OPPORTUNITY TO TEACH CONSISTENT MEASUREMENT IN TEACHING TRIGONOMETRY.** By R. D. Bohannon P. Soc. P. E. E., vol. 15, p. 662. 6 pages.
- THE PLACE OF MODERN LANGUAGES IN THE CURRICULUM OF THE SCHOOL OF ENGINEERING.** By A. S. Wright P. Soc. P. E. E. vol. 16, p. 136. 22 pages
- RESULTS OF AN EXPERIMENT IN TEACHING FRESHMAN ENGLISH** By W. Kent. P. Soc. P. E. E., vol. 16, p. 74. 24 pages.
- ENGINEERING ENGLISH.** By T. J. Johnston. P. Soc. P. E. E., vol. 11, p. 361 10 pages.
- THE COURSES IN ENGLISH IN OUR TECHNICAL SCHOOLS.** By J. M. Tellen P. Soc. P. E. E., vol. 16, p. 61. 14 pages.
- STANDARDIZATION OF ENGLISH.** By T. A. Rickard. M. & M., vol. 30, p. 764. 8 columns.
- DESCRIPTIVE GEOMETRY: Its Importance in the Engineering Curriculum and the Methods of Teaching It.** By O. E. Randall. P. Soc. P. E. E., vol. 15, p. 619. 16 pages.
- REPORT OF WORK DONE IN THE DIVISION OF CHEMISTRY AND PHYSICS.** U. S. G. S., Bull. 27, 80 pages, 1886; Bull. 42, 152 pages, I., 1887; Bull. 55, 96 pages, I., 1889; Bull. 60, 174 pages, 1890; Bull. 64, 60 pages, 1890; Bull. 78, 131 pages, 1891; Bull. 90, 77 pages, 1892; Bull. 113, 115 pages, 1893.
- THE FUNCTION OF THE LECTURE IN TECHNICAL EDUCATION.** By J. P. Jackson. P. Soc. P. E. E., vol. 14, p. 187. 11 pages.
- LOOSE-LEAF NOTES FOR LABORATORY USE.** By C. H. Benjamin. P. Soc. P. E. E., vol. 15, p. 574 12 pages.
- BLANK FORMS FOR USE IN ELECTRICAL ENGINEERING INSTRUCTION** By H. H. Norris. P. Soc. P. E. E., vol. 14, p. 170. 16 pages.
- RATING OF LABORATORY AND CLASS-ROOM WORK IN SCHEDULES OF COURSES.** By F. C. Caldwell. P. Soc. P. E. E., vol. 11, p. 117. 9 pages.
- THE CROWDING OF THE CURRICULUM.** By A. C. Humphreys. P. Soc. P. E. E., vol. 12, p. 53. 21 pages.
- THE USE, ABUSE, AND CARE OF LANTERN SLIDES.** By H. H. Norris. P. Soc. P. E. E., vol. 16, p. 343. 6 pages.
- AN EDUCATIONAL EXPERIMENT.** By W. G. Raymond. P. Soc. P. E. E., vol. 15, p. 79. 11 pages.
- TRAINING AN ARTIST IN THE FORCES OF NATURE.** By E. H. Mullin. P. Soc. P. E. E., vol. 11, p. 350. 10 pages.
- SYMPOSIUM: Methods of Handling Problem Work in Large Classes.** By E. R. Maurer. P. Soc. P. E. E., vol. 13, p. 34, 4 pages; by C. A. Waldo, p. 38, 21 pages, I.
- THE TECHNICAL AND PEDAGOGIC VALUE OF EXAMINATIONS.** By H. H. Norris. P. Soc. P. E. E., vol. 15, p. 605. 14 pages.
- THE HONOR SYSTEM OF EXAMINATIONS.** By W. H. Schuerman. P. Soc. P. E. E., vol. 15, p. 635. 20 pages.
- SOME EXAMINATION DATA.** By R. D. Bohannon. P. Soc. P. E. E., vol. 15, p. 599. 6 pages
- FRAUDS IN EXAMINATIONS.** By F. C. Caldwell. P. Soc. P. E. E., vol. 14, p. 264. 7 pages.
- REGULATIONS GOVERNING EXAMINATIONS.** By W. K. Hatt. P. Soc. P. E. E., vol. 17, p. 192. 16 pages.
- ATHLETICS FOR ENGINEERING STUDENTS.** By C. L. Thornburg. P. Soc. P. E. E., vol. 15, p. 668. 5 pages.

THE DUTIES AND WORK OF THE DEAN IN A COLLEGE OF ENGINEERING. By J. M. White. P. Soc. P. E. E., vol. 15, p. 266. 3 pages. D

THE FUNCTION OF THE DEAN OF A COLLEGE OF ENGINEERING. By F. E. Turneure. P. Soc. P. E. E., vol. 15, p. 257. 12 pages.

THE WORK OF THE DEAN OF THE FACULTY OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY. By A. E. Burton. P. Soc. P. E. E., vol. 12, p. 231. 11 pages.

REQUISITE QUALIFICATIONS OF AN ENGINEERING COLLEGE INSTRUCTOR. By O. B. Zimmerman. P. Soc. P. E. E., vol. 17, p. 208. 7 pages.

RELATION OF THE OLDER TO THE YOUNGER GRADUATE. By C. B. Goring. Sch. Mines Quart., vol. 31, p. 381. 3 pages.

Mining Education

ADVICE TO MINING STUDENTS. By J. H. Collins. Min. & Sci. Press, vol. 96, p. 638. 7 columns.

PRESSENT GREATEST NEED OF MINING. By J. T. Beard. M. & M., vol. 30, p. 680. 4½ columns.

MINING EDUCATION. By T. T. Read. Min. & Sci. Press, vol. 96, p. 767, 3 columns; p. 787, 1½ columns.

MINING EDUCATION. By J. A. Wilkinson. P. C. M. & M. Soc. S. A., vol. 7, p. 26, 13 columns, I.; p. 142, 6 columns; p. 175, ½ column; p. 322, 5 columns.

EDUCATION OF MINING ENGINEERS. P. C. M. & M. Soc. S. A., vol. 7, p. 310. 2 columns.

THE TRAINING OF A MINING ENGINEER. By J. B. Lewis. T. Au. I. M. E., vol. 13, p. 26. 10 pages.

IMPORTANCE OF MINING EDUCATION. Min. Mag., vol. 9, p. 340. 2½ pages.

EDUCATING MINING ENGINEERS. Min. & Sci. Press, vol. 20, p. 360. 2 columns.

MINING SCHOOLS IN THE UNITED STATES. Min. & Sci. Press, vol. 22, p. 184. 1½ columns.

PLAN OF A COLLEGE OF PRACTICAL MINING AND MANUFACTURING SCIENCE. Min. Mag., vol. 9, p. 405. 8 pages.

THE AMERICAN SCHOOL OF MINES. Min. Mag., vol. 8, p. 60, 4 pages; vol. 7, p. 244, 4½ pages.

ORGANIZATION OF THE SCHOOL OF MINES AT FREIBERG, SAXONY. Min. Mag., vol. 8, p. 361, 2 pages, p. 507, 1½ pages.

THE ROYAL SCHOOL OF MINES. By W. McDermott. Min. Mag., vol. 4, p. 123. 4 columns. D.

FRENCH SECONDARY MINING SCHOOLS. By P. Dumaine. M. & M., vol. 30, p. 254. 3½ columns.

MINING SCHOOLS AND THEIR GRADUATES. Min. & Sci. Press, vol. 95, p. 237. 2 columns.

OLD-TIME MINING SCHOOLS AND MINING. By W. C. Wynkoop. Min. & Sci. Press, vol. 101, p. 735. 3½ columns.

AMERICAN MINING SCHOOLS AND WHAT THEY HAVE DONE FOR THE MINING INDUSTRY. Min. & Sci. Press, vol. 98, p. 483. 1 column.

THE FREIBERG SCHOOL OF MINES. E. & M. J., vol. 89, p. 1261. 1½ columns.

THE MACKAY MINING BUILDING, UNIVERSITY OF NEVADA. E. & M. J., vol. 85, p. 1245. 2½ columns. I.

OPENING OF THE NEW MINING BUILDING OF THE UNIVERSITY OF CALIFORNIA. Min. & Sci. Press, vol. 95, p. 270. 5 columns. I.

FEDERAL AID FOR STATE MINING SCHOOLS. E. & M. J., vol. 87, p. 261. 2 columns.

MINING AND METALLURGICAL EDUCATION. By W. Knox. T. Au. I. M. E., vol. 7, p. 1. 15 pages.

EDUCATION OF MINING ENGINEERS. By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 275. 3½ columns.

TO YOUNG MEN ABOUT TO BECOME MINING ENGINEERS. By C De Kalb Min & Sci Press, vol 95, p. 561 7 columns.

MINING GRADUATES. P. C. M. & M. Soc S A, vol 6, p 66 1 column

Engineering Schools

TECHNICAL EDUCATION. By E Mac Kay J. M. Soc. N. S., vol. 11, p. 45. 7 pages

TECHNICAL EDUCATION. By D. Solan J. M Soc. N. S., vol. 11, p 53 4 pages.

SOME CHARACTERISTICS OF TECHNICAL EDUCATION IN AUSTRALIA. By S H. Barraclough. P. Soc P E. E., vol. 11, p. 234 23 pages.

ADAPTING MEANS TO THE ENDS IN TECHNICAL EDUCATION. By A L. Rice P Soc. P. E. E, vol 16, p. 121. 5 pages.

TECHNICAL EDUCATION WITH A VIEW TO TRAINING FOR LEADERSHIP. By F. W. Atkinson. P. Soc. P. E. E., vol. 15, p 230. 26 pages

THE STANDARDS TO BE PLACED BEFORE THE YOUNG ENGINEER. By J P. Munroe. P Soc P. E. E, vol. 14, p 163. 7 pages.

THE ADVISABILITY OF INSTRUCTING ENGINEERING STUDENTS IN THE HISTORY OF THE ENGINEERING PROFESSION. By J. A. L. Waddell. P. Soc. P. E. E., vol. 11, p 193. 24 pages.

WHY NOT TEACH ABOUT MEN, THE MOST IMPORTANT AND DIFFICULT TOOLS THE ENGINEER USES? By J. F. Hayford. P. Soc. P. E. E., vol. 14, p. 198. 36 pages.

ENGINEERING EDUCATION. Min. & Sci. Press, vol. 59, p. 664. 2 columns.

THE RELATIONS OF THE ENGINEERING SCHOOLS TO POLYTECHNIC INDUSTRIAL EDUCATION. By D C. Jackson. P. Soc P. E. E., vol. 15, p. 363. 28 pages.

RELATIVE EFFICIENCY OF INSTRUCTION IN ENGINEERING SUBJECTS. By J. M. White P Soc. P. E. E., vol 15, p 124. 7 pages.

PEDAGOGIC METHODS IN ENGINEERING COLLEGES. By W Kent P Soc. P. E. E., vol 15, p. 90. 34 pages

SCHOLASTICISM IN ENGINEERING EDUCATION. By J P Jackson. P. Soc. P E. E., vol. 16, p. 162. 12 pages.

REPORT OF COMMITTEE ON STATISTICS OF ENGINEERING EDUCATION. By W. T. Magruder. P. Soc. P. E. E, vol. 11, p. 258. 1 page. D.

REPORT OF THE COMMITTEE ON STATISTICS OF ENGINEERING EDUCATION. By W. T. Magruder. P. Soc. P. E. E, vol. 14, p. 94. 2 pages. Table

THE DUAL DEGREE FOR ENGINEERING COURSES. By P. C Nugent. P. Soc P. E. E., vol. 14, p. 141. 5 pages.

ENGINEERING EDUCATION BEFORE AND AFTER THE WAR. By J. B. Webb. P Soc. P. E. E, vol. 15, p. 58. 10 pages.

THE WORK OF THE FRESHMAN AND SOPHOMORE YEARS OF ENGINEERING COURSES. By F. A. Fish P. Soc. P. E. E, vol. 15, p. 201 24 pages.

THE FIVE-YEAR COURSES. By W. T. Magruder. P. Soc. P. E. E, vol. 17, p 128 5 pages.

THE FIVE AND SIX-YEAR COURSES IN ENGINEERING SCHOOLS. By R. Fletcher P. Soc. P. E. E., vol 17, p. 121, 7 pages; p. 142, 30 pages.

THE LENGTH OF AN ENGINEERING COURSE. By C. Derleth. P. Soc. P. E. E., vol 17, p. 134. 7½ pages.

SOME PHASES IN THE ORGANIZATION OF STATE UNIVERSITIES. By L. E. Reber. P. Soc. P. E. E, vol. 15, p. 271. 14 pages.

THE ORGANIZATION OF A SCHOOL OF ENGINEERING. By A. H. Ford. P. Soc. P. E. E., vol. 13, p. 100. 14 pages.

ENGINEERING EDUCATION IN SOUTHERN STATE UNIVERSITIES. By W. H. Drake. P. Soc. P. E. E., vol. 11, p. 218. 16 pages.

THE FEDERAL POLYTECHNIC AT ZURICH FROM AN ADMINISTRATIVE STAND-POINT. By H. W. Tyler. P. Soc. P. E. E., vol. 14, p. 239. 18 pages.

THE NAVAL ACADEMY AS A TECHNICAL SCHOOL. By I. N. Hollis. P. Soc. P. E. E., vol. 12, p. 159. 34 pages.

THE NATIONAL ENGINEERING SCHOOL OF MEXICO. By A. R. Townsend. E. & M. J., vol. 87, p. 256. 1½ columns.

THE GRADUATE SCHOOL IN ENGINEERING EDUCATION. By C. L. Crandall. P. Soc. P. E. E., vol. 14, p. 13. 9 pages.

THE NEW ELECTRICAL ENGINEERING BUILDING AT THE WORCESTER POLYTECHNIC INSTITUTE. By H. B. Smith and A. W. French. P. Soc. P. E. E., vol. 15, p. 131. 17 pages I.

CAREERS OF GRADUATES IN MECHANICAL ENGINEERING. By F. De R. Furtman. P. Soc. P. E. E., vol. 16, p. 307. 36 pages. D.

TECHNICAL INSTRUCTION IN HYDRAULIC ENGINEERING. By D. W. Mead. P. Soc. P. E. E., vol. 16, p. 174. 28 pages. I.

CHEMICAL ENGINEERING. P. C. M. & M. Soc. S. A., vol. 6, p. 25. 2 columns.

THE TRAINING OF A CHEMICAL ENGINEER. By H. P. Talbot. P. Soc. P. E. E., vol. 14, p. 22. 13 pages.

HIGHWAY ENGINEERING. By L. W. Page. P. Soc. P. E. E., vol. 17, p. 57. 10 pages.

THE NEED FOR SYSTEMATIC INSTRUCTION IN HIGHWAY ENGINEERING. By A. N. Johnson. P. Soc. P. E. E., vol. 13, p. 155. 11 pages.

TEACHING AGRICULTURAL ENGINEERING IN LAND GRANT COLLEGES. By C. J. Zintheo. P. Soc. P. E. E., vol. 13, p. 166. 11 pages.

STATISTICS OF THE GRADUATES IN ENGINEERING FROM THE UNIVERSITY OF MICHIGAN. By M. E. Cooley and J. A. Moyer. P. Soc. P. E. E., vol. 17, p. 179. 14 pages. D.

OPPORTUNITIES FOR ENGINEERING GRADUATES IN THE GOVERNMENT SERVICE. By J. F. Hayford. P. Soc. P. E. E., vol. 13, p. 87. 13 pages.

THE CONFERENCE DEPARTMENT AT LEHIGH UNIVERSITY. By H. S. Drinker. T. A. I. M. E., vol. 41, p. 833. 2 pages.

THE PLACE OF THE INTERCOLLEGIATE SCIENTIFIC FRATERNITY IN AN ENGINEERING COLLEGE. By E. H. Williams. P. Soc. P. E. E., vol. 15, p. 295. 6 pages.

Mining Institutes

TEACHING ENGLISH TO FOREIGNERS. M. & M., vol. 31, p. 60. 1½ columns.

THE EDUCATION OF COAL MINERS. E. & M. J., vol. 86, p. 723. ½ column.

EDUCATION AMONG MINERS. Min. Mag., vol. 10, p. 54, 1½ pages; p. 191, 3½ pages; p. 273, 4½ pages.

Correspondence and Trade Schools

SECONDARY MINING EDUCATION. By H. H. Stoek. M. & M., vol. 29, p. 203. 7 columns.

SECONDARY MINING EDUCATION. M. & M., vol. 29, p. 316, 2 columns; p. 478, 2½ columns.

SECONDARY MINING EDUCATION. By H. H. Stoek. J. C. M. I., vol. 11, p. 504. 20 pages.

THE SUPPORT OF SECONDARY TECHNICAL SCHOOLS BY THE STATE. By F. E. Turneure. P. Soc. P. E. E., vol. 13, p. 184. 21 pages.

THE NEW OPPORTUNITY FOR THE SECONDARY SCHOOL. By C. M. Woodward. P. Soc. P. E. E., vol. 11, p. 25. 8½ pages.

REPORT OF COMMITTEE ON INDUSTRIAL EDUCATION. By A. L. Williston. P. Soc. P. E. E., vol 16, p. 363. 43 pages.

REPORT OF THE COMMITTEE ON INDUSTRIAL EDUCATION. P. Soc. P. E. E., vol. 15, p. 416. 28 pages.

EDUCATION FOR INDUSTRIAL WORKERS. By A. D. Dean. P. Soc. P. E. E., vol. 15, p. 494. 16 pages.

THE CORRESPONDENCE SCHOOL: Its Relation to Technical Education and Some of Its Results. By J. J. Clark. P. Soc. P. E. E., vol. 14, p. 271. 16 pages.

EDUCATION OF MECHANICS. By H. M. Lane. P. Soc. P. E. E., vol. 13, p. 177. 7 pages.

EDUCATION FOR FACTORY MANAGEMENT. By H. Diemer. P. Soc. P. E. E., vol. 11, p. 151. 20 pages.

THE ORGANIZATION OF TRADE AND ELEMENTARY TECHNICAL SCHOOLS. By A. L. Williston. P. Soc. P. E. E., vol. 11, p. 46. 12 pages.

THE SPECIAL APPRENTICESHIP COURSE. By C. E. Downton. P. Soc. P. E. E., vol. 15, p. 459. 6 pages.

Theory and Practice

PRACTICE AND SCIENCE. P. C. M. & M. Soc. S. A., vol. 9, p. 370. 2 columns.

APPLICATION OF DESCRIPTIVE GEOMETRY TO MINING PROBLEMS. By J. W. Roe. T. A. I. M. E., vol. 41, p. 512. 21 pages. I.

A BRIEF METHOD FOR CALCULATING INTEREST. By J. J. Smith. E. & M. J., vol. 90, p. 812. 2½ columns

A PRECISION SLIDE RULE. By A. N. Lurie. E. & M. J., vol. 89, p. 655. 1½ columns. I.

THE DEFLECTION POLYGON OF A FRAMED STRUCTURE AS A FUNICULAR POLYGON. By M. S. Falk. Sch. Mines Quart., vol. 30, p. 27. 5½ pages. D.

USEFUL FORMULAS. By F. Close. E. & M. J., vol 87, p. 1241. 2½ columns.

Societies, Periodicals and Expositions

SOME NOTES ON THE HISTORY AND RECENT DEVELOPMENT OF THE CANADIAN MINING INSTITUTE. By H. Mortimer-Lamb. J. C. M. I., vol. 13, p. 588. 8 pages.

MINING AND METALLURGICAL SOCIETY. Min. & Sci. Press, vol. 96, p. 603. 4½ columns.

MINING ENGINEERS AND MINING INSTITUTES. By J. D. Kendall. J. C. M. I., vol. 13, p. 596. 3½ pages.

THE ENGINEER AND THE ENGINEERING SOCIETY. By G. E. Flanagan. P. E. Soc. W. Pa., vol. 25, p. 152. 10 pages.

THE AMERICAN PEAT SOCIETY. E. & M. J., vol. 90, p. 254. 2 columns.

THE INSTITUTO GEOLOGICO DE MEXICO. By Jose G. Aguilera. E. & M. J., vol. 88, p. 857. 7½ columns. I.

ALASKA-YUKON-PACIFIC EXPOSITION. By R. L. Herrick. M. & M., vol. 30, p. 99. 12 columns. I.

THE ALASKA-YUKON-PACIFIC EXPOSITION. By E. Jacobs. E. & M. J., vol. 88, p. 353, 8½ columns, I.; p. 407, 9 columns, I.

A JAPANESE MINING EXHIBIT. By R. Kanda. Min. & Sci. Press, vol. 101, p. 608. 4 columns.

THE TAU BETA PHI ASSOCIATION. By R. C. Matthews. P. Soc. P. E. E., vol. 15, p. 301. 7 pages.

THE PART OF SIGMA XI IN SCIENTIFIC EDUCATION. By H. B. Ward. P. Soc. P. E. E., vol. 15, p. 285. 10 pages.

TECHNICAL WRITING. By H. H. Stoeck. M. & M., vol. 29, p. 84, 5 columns; p. 134, 5 columns, I.

MINING LITERATURE. By A. Greenwell. J. C. M. I., vol. 13, p. 579. 9½ pages.

STANDARDIZATION OF ENGLISH IN TECHNICAL LITERATURE. By T. A. Rickard. T. I. M. & M., vol. 19, p. 538. 58 pages.

STANDARDIZATION OF ENGLISH IN TECHNICAL LITERATURE By T. A. Rickard. Min. & Sci. Press, vol. 101, p. 233. 5½ columns.

Experimentation and Research

See first volume of Index.

Summer School Work

SUMMER SCHOOLS FOR PROSPECTORS. J. C. M. I., vol. 11, p. 504. 5 pages.

SUMMER SCHOOLS FOR PROSPECTORS. M & M, vol. 29, p. 205. 1½ columns.

THE SUMMER SCHOOL PROBLEM, PARTICULARLY FOR SURVEYING AND GEOLOGY. By C. Derleth. P. Soc. P. E. E., vol. 17, p. 216. 22 pages.

THE CORNELL SUMMER SCHOOL OF SURVEYING By C. L. Crandall. P. Soc. P. E. E., vol. 13, p. 71. 16 pages. I.

UNIVERSITY OF WISCONSIN SUMMER SCHOOL OF SURVEYING. By L. S. Smith. P. Soc. P. E. E., vol. 13, p. 63. 8 pages.

PRACTICAL EXPERIENCE IN MINING. By J. P. Channing. Sch. Mines Quart., vol. 31, p. 384. 2½ pages.

FIELD WORK IN CIVIL ENGINEERING AT IOWA STATE COLLEGE. By A. Marston. P. Soc. P. E. E., vol. 12, p. 131. 28 pages. I.

Definitions and Terms

DEFINITION OF ASSAYS. E. & M. J., vol. 85, p. 327. ½ column.

STANDARDIZATION OF ASSAY TERMS. Min. & Sci. Press, vol. 100, p. 418. 1 column.

See also **METHODS OF ASSAYING.**

DEFINITION OF "MARGIN." E. & M. J., vol. 85, p. 970. ½ column.

See also **MINE INVESTMENTS.**

NORTHERN TERMS By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 702. 3 columns.

A JUDICIAL DEFINITION OF "LAKE COPPER." E. & M. J., vol. 86, p. 842. 1 column.

TAILING OR TAILINGS. By R. W. Raymond. E. & M. J., vol. 85, p. 1067. ½ column.

A GLOSSARY OF TERMS USED IN MINING GEOLOGY. By F. D. Power. T. Au. I. M. E., vol. 3, p. 90. 68½ pages.

Drawing, Blue-Printing, Etc.

SKETCHING: Its Use in Engineering. By W. Truran. Min. Mag, London, vol. 2, p. 124. 2 columns. I.

BLUE-PRINTING WRINKLES. By E. B. Durham. M & M., vol. 29, p. 71. 3 columns.

THE MARCUS ELIPSOGRAF. Min. & Sci. Press, vol. 101, p. 743. ¼ column. I.

Weights and Measures

ABSOLUTE AND GRAVITATIONAL SYSTEMS OF UNITS. By E. R. Maurer. P. Soc. P. E. E., vol. 12, p. 209. 12 pages.

THE CARAT: Unit of Weight for Precious Stones. Min. Mag, London, vol. 2, p. 296. 1 column.

THE CARAT WEIGHT. By E. J. Valentine. Min. & Sci. Press, vol. 96, p. 602. ½ column.

THE CARAT WEIGHT. By E. J. Valentine. T. I. M. & M., vol. 17, p. 430. 4½ pages.

THE CARAT WEIGHT. By E. J. Valentine. M. & M., vol. 29, p. 34. 3½ columns.

INTERNATIONAL ATOMIC WEIGHTS. P. C. M. & M. Soc. S. A., vol. 5, p. 215. 1 column.

SUGGESTIONS FOR A NEW ATOMIC THEORY By J. Moir. P. C. M & M Soc. S. A., vol. 9, p. 334. 16½ columns. I.

SUGGESTIONS FOR A NEW ATOMIC THEORY. By J. Moir. P. C. M. & M. Soc S A, vol. 10, p. 96. 6 columns.

REVISED ATOMIC WEIGHTS. By F. H. Mason. Min. & Sci. Press, vol. 101, p. 673. 1½ columns.

ATOMIC WEIGHT OF CHLORINE. By F. H. Mason. Min. & Sci. Press, vol. 100, p. 930. 1½ columns

See also **CHEMISTRY**

THE ASSAY WEIGHT AND ITS RELATION TO THE BALANCE OF PRECISION. By A. Whitby. P. C. M. & M. Soc. S. A, vol. 5, p. 40, 11 columns; p. 82, ½ column; p. 101, 7½ columns; p. 127, ½ column; p. 150, 1 column.

See also **METHODS OF ASSAYING.**

METHOD OF SPECIFIC GRAVITY DETERMINATION. By A. C. Dart. Min. & Sci. Press, vol. 100, p. 529. 1 column.

VARA CONVERSION TABLE. Conversion of the Spanish Vara into Feet. Min. & Sci. Press, vol. 99, p. 537. 1½ columns. Table.

THE SQUARE FATHOM. Min. Mag., London, vol. 3, p. 206. 6½ columns.

GOLD AND SILVER CONVERSION TABLES GIVING THE COINING VALUE OF TROY OUNCES OF FINE METAL, ETC. By A. Williams. U. S. G. S., Bull. 2, 8 pages 1883.

MELTING POINTS OF ELEMENTS. P. C. M. & M. Soc S. A., vol. 7, p. 297. 2 columns. Table.

See also **PROPERTIES OF VARIOUS METALS.**

Symbols

See first volume of Index.

Models of Mines and Machinery

MODEL OF RICHARDSON MINE, UPPER SEAL HARBOUR, NOVA SCOTIA. J. M. Soc. N. S., vol. 13, facing p. 26. I.

MINE MODELS AND PLANS. By N. Dudley. T. Au. I. M. E., vol. 1, p. 99. 4½ pages.

GLASS MINE-MODELS. By E. D. North. T. A. I. M. E., vol. 40, p. 755, 7 pages, I.; Discussion, p. 913, 3 pages.

MODEL OF THE NORTH STAR MINE, GRASS VALLEY, CALIFORNIA: Model for Inclined Veins. E. & M. J., vol. 90, p. 1243. 1½ columns. I.

UNITED VERDE MINE MODEL. By C. V. Hopkins. M. & M., vol. 30, p. 501. 3½ columns. I.

CRUST MAPS AND MODELS. By T. S. Harrison and H. C. Zulch. M. & M., vol. 29, p. 49. 10 columns. I.

HEAD-FRAME MODELS MADE OF PAPER. M. & M., vol. 30, p. 401. 3 columns. I.

See also **MINE MAPS.**

Engineering Laboratories, Government Mint, Etc.

THE EXPERIMENT STATION AT LIEVIN, FRANCE. By T. Callot. E. & M. J., vol. 88, p. 1. 12½ columns. I.

LABORATORIES FOR TESTING STRUCTURAL MATERIALS, UNITED STATES GEOLOGICAL SURVEY, ST. LOUIS, MISSOURI: Mortars, Cements and Concretes. P. Soc. P. E. E., vol. 13, p. 314. 7 pages

THE LABORATORY: Its Economic Value. By A. M. Johnston. P. C. M. & M. Soc. S. A., vol. 8, p. 101, 14½ columns, I.; p. 147, 5 columns; p. 210, 1 column; p. 240, 6 columns; p. 297, 3½ columns.

THE ENGINEERING EXPERIMENT STATION AT IOWA STATE COLLEGE. By G. W. Bissell. P. Soc. P. E. E., vol. 15, p. 549. 9 pages.

A LABORATORY COURSE IN TESTING MATERIALS OF CONSTRUCTION. By W. K. Hatt. P. Soc. P. E. E., vol. 13, p. 252. 27 pages.

LABORATORY EQUIPMENT AT THE WASHOE REDUCTION WORKS. M. & M., vol. 30, p. 522. 1 column.

- THE ENGINEERING EXPERIMENT STATION OF THE UNIVERSITY OF ILLINOIS.** By L. P. Buckenridge. P. Soc. P. E. E., vol. 15, p. 558. 16 pages.
- CEMENT LABORATORY PRACTICE.** By I. O. Baker. P. Soc. P. E. E., vol. 16, p. 216. 22 pages. I.
- ELECTRICAL LABORATORY EQUIPMENT AND EFFICIENCY** By S. S. Edmands. P. Soc. P. E. E., vol. 16, p. 202. 13 pages. I.
- THE WORK IN THE MECHANICAL AND ELECTRICAL LABORATORIES OF SIBLEY COLLEGE** By R. C. Carpenter. P. Soc. P. E. E., vol. 14, p. 234. 5 pages.
- THE EQUIPMENT OF AN ELECTRICAL ENGINEERING LABORATORY.** By W. M. Riggs. P. Soc. P. E. E., vol. 11, p. 179. 14 pages.
- THE ORGANIZATION AND CONDUCT OF AN ELECTRICAL ENGINEERING LABORATORY.** By J. W. Shuster. P. Soc. P. E. E., vol. 15, p. 148. 7 pages.
- THE BUILDING AND EQUIPMENT OF THE ROCKEFELLER PHYSICAL LABORATORY OF THE CASE SCHOOL OF APPLIED SCIENCE** By D. C. Miller. P. Soc. P. E. E., vol. 15, p. 180. 7 pages. I.
- DETERMINATION OF THE VELOCITY OF GAS WITH THE PITOT TUBE.** By O. E. Jager and G. C. Westley. E. & M. J., vol. 88, p. 468. $4\frac{1}{2}$ columns. I.
- THE LIQUEFACTION OF GASES.** P. C. M. & M. Soc. S. A., vol. 5, p. 182. $5\frac{1}{2}$ columns.
- THE PROPERTIES OF MATTER: Solid State.** P. C. M. & M. Soc. S. A., vol. 9, p. 449. 2 columns.
- General Requirements of Engineering Education**
- THE PROGRESS AND INFLUENCE OF TECHNICAL EDUCATION.** By V. C. Alderson. P. Soc. P. E. E., vol. 13, p. 127. 19 pages.
- ENGINEERING INSTRUCTION IN LARGE TECHNICAL SCHOOLS.** By H. H. Norris. P. Soc. P. E. E., vol. 13, p. 114. 13 pages. D.
- A PRACTICAL METHOD OF INSTRUCTING ENGINEERING STUDENTS IN THE BIOGRAPHY AND HISTORY OF THEIR PROFESSION.** By R. Fletcher. P. Soc. P. E. E., vol. 12, p. 36. 8 pages.
- A PROPOSED COURSE IN GENERAL ENGINEERING.** By H. Frost. P. Soc. P. E. E., vol. 16, p. 98. 15 pages.
- ENGINEERING EDUCATION FROM THE STANDPOINT OF THE PRACTICING ENGINEER.** By A. W. Ayer. P. Soc. P. E. E., vol. 11, p. 93. 8 pages.
- ON THE CONCENTRIC METHOD OF EDUCATION IN ENGINEERING.** By V. Karapetoff. P. Soc. P. E. E., vol. 16, p. 258. 21 pages. D.
- THE CORRELATION OF COURSES IN ENGINEERING COLLEGES.** By G. C. Anthony. P. Soc. P. E. E., vol. 16, p. 126. 10 pages.
- THE TYPICAL COLLEGE COURSES DEALING WITH THE PROFESSIONAL AND THEORETICAL PHASES OF ELECTRICAL ENGINEERING** By D. C. Jackson. P. Soc. P. E. E., vol. 11, p. 336. 14 pages.
- THE PROPER QUALIFICATIONS OF ELECTRICAL ENGINEERING SCHOOL GRADUATES FROM THE MANUFACTURER'S STANDPOINT.** By L. A. Osborne. P. Soc. P. E. E., vol. 11, p. 303. $32\frac{1}{2}$ pages.
- THE PROPER QUALIFICATIONS OF ELECTRICAL ENGINEERING SCHOOL GRADUATES FROM THE TELEPHONE ENGINEER'S STANDPOINT.** By B. Gurard. P. Soc. P. E. E., vol. 11, p. 290. 11 pages.
- COURSES IN INDUSTRIAL ENGINEERING.** By H. Diemer. P. Soc. P. E. E., vol. 15, p. 510. 14 pages.
- A COMBINED CULTURAL AND TECHNICAL ENGINEERING COURSE.** By G. R. Chatburn. P. Soc. P. E. E., vol. 15, p. 222. 8 pages.

- MECHANICAL ENGINEERING CURRICULUMS.** By W. T. Magruder. P Soc. P. E. E., vol 16, p. 113. 8 pages.
- RECENT DEVELOPMENTS AND PRESENT TENDENCIES IN TECHNICAL EDUCATION.** By F. E. Turneure. P. Soc. P. E. E., vol. 17, p. 19. 20 pages.
- EDUCATIONAL VALUES AND OUR LIBERALITY IN MODERN EDUCATIONS.** By R. H. Thurston. P Soc. P. E. E., vol. 11, p 36. 10 pages.
- CONTINUITY OF EDUCATION** By F. P. Fish. Sch. Mines Quart., vol. 30, p. 1. 20 pages.
- THE SIX-DAY SYSTEM AT THE UNIVERSITY OF MINNESOTA.** By F. H. Constant. P. Soc. P. E. E., vol 15, p. 187. 14 pages.
- METHODS OF STUDY FOR TECHNICAL STUDENTS.** By J. P. Jackson. P. Soc. P. E. E., vol. 11, p. 101. 16 pages.
- SECOND DEGREES FOR GRADUATES OF ENGINEERING COURSES.** By W. F. M. Goss. P. Soc. P. E. E., vol. 16, p. 159. 4 pages.
- REPORT OF COMMITTEE ON REQUIREMENTS FOR GRADUATION: With Particular Reference to Engineering Schools** P. Soc. P. E. E., vol. 12, p 99, 32 pages; p. 205, 27 pages.
- Relation of Engineering Education to the Industries**
- THE RELATION OF TECHNICAL EDUCATION TO INDUSTRIAL PROGRESS** By F. H. Sexton. J. M. Soc. N. S., vol. 11, p. 1. 25 pages.
- THE RELATION BETWEEN TECHNICAL EDUCATION AND INDUSTRIAL PROGRESS.** By R. H. Richards. J. M. Soc. N. S., vol 11, p. 27. 16½ pages.
- THE COÖPERATIVE COURSE IN ENGINEERING AT THE UNIVERSITY OF CINCINNATI** By H. Schneider. P Soc. P. E. E., vol 15, p. 391. 8 pages.
- THE COÖPERATIVE ENGINEERING COURSE AT THE UNIVERSITY OF CINCINNATI FROM THE MANUFACTURER'S STANDPOINT.** By C. S. Gingrich. P Soc. P. E. E., vol 15, p. 399 18 pages.
- TWO YEARS OF THE COÖPERATIVE ENGINEERING COURSES AT THE UNIVERSITY OF CINCINNATI.** By H. Schneider. P. Soc. P. E. E., vol. 16, p. 279. 28 pages.
- THE ENGINEERING COLLEGE AND THE ELECTRIC MANUFACTURING COMPANY.** By C. F. Scott. P. Soc. P. E. E., vol. 15, p. 465. 29 pages.
- THE ENGINEERING EXPERIMENT STATION AND ITS RELATION TO ILLINOIS INDUSTRIES.** By L. P. Breckenridge. J. W. Soc. E., vol. 14, p. 487. 46 pages. I.
- THE EXTENSION OF ENGINEERING INVESTIGATIONAL WORK BY ENGINEERING SCHOOLS.** By A. N. Talbot. P. Soc. P. E. E., vol. 12, p. 75. 9 pages.
- THE RELATION OF ENGINEERING EDUCATION TO INDUSTRIES.** By C. B. Going. P Soc. P. E. E., vol. 17, p. 67. 12 pages.
- A BUSINESS PROPOSITION: Increasing the Efficiency of Society by Engineering Training.** By J. A. L. Waddell P Soc. P. E. E., vol 12, p. 44. 8 pages.
- EMPLOYERS' REQUIREMENTS OF TECHNICAL GRADUATES.** By H. Diemer P. Soc. P. E. E., vol 17, p 172. 7 pages.
- WHY MANUFACTURERS DISLIKE COLLEGE STUDENTS.** By F. W. Taylor. P. Soc. P. E. E., vol. 17, p. 79. 26 pages.

EXPLOSIVES FOR MINING PURPOSES**Development of Explosives**

TWENTY YEARS PROGRESS IN EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 9, p. 247. 1 column

RESEARCHES IN EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 7, p. 389. 1½ columns.

Explosive Regulations for Cities, Mines, Etc.

RULES IN UTAH REGARDING POWDER IN MINES. M & M, vol. 30, p. 324. ½ column.

POWDER RULES IN A NOVA SCOTIA COAL MINE. E. & M. J., vol. 86, p. 625. 2 columns

THE NEW OHIO LAW ON EXPLOSIVES. E. & M. J., vol. 86, p. 823. 1½ columns

COAL-MINE LEGISLATION IN KANSAS. E. & M. J., vol. 87, p. 648. 1 column.

Kinds of Explosives

STANDARDIZATION OF EXPLOSIVES By C. E. Munroe. Min. & Sci Press, vol. 100, p. 326. 1½ columns.

THE DIFFERENCE BETWEEN PERMISSIBLE EXPLOSIVES AND BLACK POWDERS. E. & M. J., vol. 89, p. 1333. ½ column.

See also **SAFETY EXPLOSIVES**

CHARACTERISTICS OF EXPLOSIVES. T. Au. I. M. E., vol. 9, p. 38. 4 pages.

HIGH EXPLOSIVES AND SAFETY-FUSE. By E. Taylor Min & Sci Press, vol. 98, p. 726 2½ columns.

See also **PRIMERS, FUSES, ETC.**

EXPLOSIVES FOR TUNNEL DRIVING M. & M., vol. 31, p. 159. 2½ columns. I.

EXPLOSIVES FOR TUNNEL DRIVING. Min. & Sci Press, vol. 101, p. 211. 1 column.

NITRO-STARCH DYNAMITE, ITS MANUFACTURE AND PRACTICAL USE IN

MINING AND QUARRYING. By A. M. Vici J. C. M. I., vol. 13, p. 470. 7 pages

DYNAMITE Its Nature and Value. Min. & Sci Press, vol. 96, p. 676. 2 columns.

A NEW EXPLOSIVE: Dualine Min. & Sci Press, vol. 20, p. 49 1½ columns

COLORED WRAPPERS FOR EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 9, p. 240, 1½ columns, p. 291, ½ column.

Manufacture of Explosives

DYNAMITE Its Manufacture and Uses. Min. & Sci Press, vol. 22, p. 355. 1½ columns.

See **First Volume of INDEX.**

Explosive Properties of Various Materials

HEAT OF COMBUSTION OF EXPLOSIVES. M & M, vol. 31, p. 429. ¾ column

HEAT OF COMBUSTION AND EXPLOSIVE TEMPERATURE OF EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 10, p. 321. 1 column.

RAPIDITY OF THE DETONATION OF EXPLOSIVES P. C. M. & M. Soc. S. A., vol. 8, p. 162. ½ column

EXPLOSIVE COMBUSTION. P. C. M. & M. Soc. S. A., vol. 8, p. 390. 1 column.

Safety Explosives

SAFETY BLASTING EXPLOSIVES. By A. M. Comey. M & M., vol. 29, p. 145. 8 columns. I.

PERMISSIBLE EXPLOSIVES. Min. & Sci Press, vol. 98, p. 801. 2½ columns.

LIST OF PERMISSIBLE EXPLOSIVES. E. & M. J., vol. 87, p. 1190. 2 columns.

PERMISSIBLE EXPLOSIVES, TESTED PRIOR TO MAY 15, 1909. M. & M., vol. 29, p. 574 2½ columns

DU PONT PERMISSIBLE EXPLOSIVES By F H Gonsolus M. & M., vol. 29, p. 578. 1½ columns

PERMISSIBLE EXPLOSIVES AS USED IN COAL MINES By J J Rutledge. E. & M J, vol. 89, p. 670. 12 columns

LIST OF PERMISSIBLE EXPLOSIVES, 1909. M. & M., vol. 30, p. 317 1½ columns.

Primers, Fuses, Etc.

THE PROPER DETONATION OF HIGH EXPLOSIVES By C. S. Hurter T. L. S. M. I., vol. 15, p. 142. 36 pages I.

EFFECT OF COMPRESSION ON BURNING OF FUSE E & M J., vol. 86, p. 823. ½ column

SAFETY-FUSES IN FRANCE. T I. M. E, vol. 37, p. 689. 2 pages.

SAFETY-FUSES AND HIGH EXPLOSIVES. Min. & Sci. Press, vol. 98, p. 726. 2½ columns.

TESTING OF SAFETY FUSE BY X-RAYS. P. C. M. & M. Soc. S. A., vol. 9, p. 183 1 column. I.

See also TESTING EXPLOSIVES.

FULMINATING VS. WHITE PHOSPHOROUS FOR IGNITERS. M. & M., vol. 31, p. 76. 1 column.

NEW FUSE FOR INCREASING THE SAFETY OF SHOT-FIRING IN FIERY MINES. P. C. M. & M. Soc. S. A., vol. 8, p. 396. 1½ columns.

NOTES ON SAFETY FUSE: Its Manufacture, Testing and Use. By J. Thomas. P. C. M. & M. Soc. S. A., vol. 5, p. 117, 10 columns, I.; p. 153, 4 columns; p. 176, 5½ columns; p. 227, 4½ columns.

See also SAFETY EXPLOSIVES.

ELECTRIC FUSES. E. & M. J., vol. 89, p. 228. 2 columns. I.

FUSES: Electrical and Delayed-Action Fuses M & M, vol 31, p 222 4 columns I.

DELAY-ACTION FUSES M. & M., vol. 30, p. 500 ¾ column.

DETONATORS. Their Construction and Use. M. & M, vol 30, p. 487 2 columns. I.

PROPER METHODS OF PLACING FUSE IN CARTRIDGES. M. & M., vol. 31, p. 224. 1 column I.

See also METHODS OF FIRING EXPLOSIVES.

FIRING AMMONIUM NITRATE EXPLOSIVES. M. & M., vol. 31, p. 767. 3 columns

FUSES FOR SUBMARINE WORK M & M, vol 31, p 224. 2 columns I.

See also KINDS OF EXPLOSIVES

Use of Explosives in Mining

A PRIMER ON EXPLOSIVES FOR COAL MINERS. By C. E. Munroe and C. Hall. U. S. G. S., Bull. 423, 61 pages 1909.

USE OF EXPLOSIVES IN BRITISH COAL MINES E. & M. J, vol. 90, p. 613. 3½ columns.

KINDS OF EXPLOSIVES USED IN THE ANTHRACITE MINES M. & M., vol. 29, p. 47. ½ column.

See also KINDS OF EXPLOSIVES.

THE USE OF BLACK POWDER IN COAL MINES. E. & M. J, vol. 90, p. 974. 2½ columns.

AMOUNT OF POWDER USED IN THE NOVA SCOTIA COAL MINES. E. & M. J., vol. 86, p. 625. ¾ column.

AN IMPROVED METHOD OF BLASTING COAL. E. & M J., vol. 86, p. 1014. 1 column. I.

MINING COAL WITH EXPLOSIVES. M. & M., vol. 80, p. 442. 3¾ columns. I.

DISCUSSION OF EXPLOSIVES IN COAL MINES. By F. F. Morris. E. & M. J, vol. 88, p. 1222. 17½ columns. I.

SHOOTING OFF THE SOLID. E. & M. J., vol. 88, p. 499. 1 column.

SHOOTING OFF THE SOLID. E. & M. J., vol. 86, p. 6. $1\frac{1}{2}$ columns

SHOOTING REGULATIONS IN UTAH. E. & M. J., vol. 87, p. 245. 2 columns.

SHOOTING REGULATIONS AT THE DAWSON COAL MINES, NEW MEXICO M. & M., vol. 31, p. 655. 1 column.

SHOT-FIRING SYSTEM AS EMPLOYED IN THE COKE DALE PLANT. E. & M. J., vol. 88, p. 1010. D.

UTAH FUEL COMPANY'S SHOT-FIRING RULES. By A. C. Watts. M. & M., vol. 30, p. 590. 3 columns.

SAFETY PRECAUTIONS IN SHOT FIRING. By H. M. Payne. E. & M. J., vol. 88, p. 876. 3 columns.

See also BLASTING IN MINES: Methods and Conditions.

REPORT OF THE FRENCH COMMISSION ON EXPLOSIVES AND COAL DUST. M. & M., vol. 29, p. 106. 2 columns.

See also COST OF BLASTING.

See also COST OF EXPLOSIVES AND BLASTING.

Quantity of Explosives Used in Mining

See first volume of Index.

Testing Explosives

TESTS OF EXPLOSIVES. M. & M., vol. 29, p. 73. $1\frac{1}{2}$ columns.

TESTS FOR EXPLOSIVES M. & M., vol. 29, p. 308. 2 columns.

TESTING EXPLOSIVES. E. & M. J., vol. 87, p. 446. $\frac{1}{2}$ column.

TESTING EXPLOSIVES. E. & M. J., vol. 88, p. 1222. 17 columns. I.

SENSITIVE TEST FOR EXPLOSIVES. By H. Kast. Min. & Sci Press, vol. 100, p. 584. $1\frac{1}{2}$ columns.

TESTING EXPLOSIVES IN SILESIA. E. & M. J., vol. 86, p. 888. 1 column.

GIANT POWDER EXPERIMENTS: Tests. Min. & Sci. Press, vol. 22, p. 25. $1\frac{1}{2}$ columns

DETERMINATION OF MOISTURE IN EXPLOSIVES. P. C. M. & M. Soc. S. A., vol. 7, p. 123. Note.

Handling Explosives

TRANSPORTATION OF EXPLOSIVES E. & M J, vol. 88, p. 131. 1 column.

SAFE TRANSPORTATION OF EXPLOSIVES. E. & M J, vol. 90, p. 1192. $2\frac{1}{2}$ columns

PRECAUTIONS IN USE OF EXPLOSIVES IN MINES. T Au. I. M. E., vol. 6, p. 28. $1\frac{1}{2}$ pages

HANDLING EXPLOSIVES IN MINES OF NEW YORK. E & M. J, vol. 86, p. 1094 2 columns.

TO DESTROY EXPLOSIVES. P. C. M. & M Soc. S. A, vol. 9, p. 318. $\frac{1}{2}$ column

Storage of Explosives

DYNAMITE STOREHOUSE. E. & M J., vol. 85, p. 1300. 1 column. I.

UNDERGROUND MAGAZINES T. Au. I. M E, vol. 9, p. 56. 1 page.

A MAGAZINE AND THAWING HOUSE FOR DYNAMITE. By G. F. Samuel M. & M., vol. 29, p. 87. 2 columns. I.

See also THAWING GIANT POWDER.

STORAGE OF EXPLOSIVES IN AND ABOUT MINES IN THE BITUMINOUS FIELDS OF PENNSYLVANIA M. & M., vol. 29, p. 95 $\frac{1}{2}$ column.

STORAGE OF EXPLOSIVES IN COLORADO. E. & M. J, vol. 86, p. 1088 $\frac{1}{2}$ column.

STORAGE OF EXPLOSIVES IN MONTANA. E. & M. J., vol. 86, p. 1093. $\frac{1}{2}$ column.

STORING EXPLOSIVES IN NEW YORK. E. & M. J., vol. 86, p. 1094. $\frac{1}{2}$ column.

STORAGE OF EXPLOSIVES IN MINES. E. & M J., vol. 90, p. 602. $\frac{3}{4}$ column.

THAWING POWDER. By W P Rogers.
Min. & Sci. Press, vol. 98, p. 248.
1 column. I.

SAFE AND CONVENIENT THAWER. Min.
& Sci Press, vol 101, p. 443. 1 col-
umn. I

See also STORAGE OF EXPLOSIVES.

Thawing Giant Powder

See first volume of Index

FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

Composition and Characteristics of Coal

VOLATILE MATTER IN COAL By H. C.
Porter and F. K. Ovitz. M & M,
vol. 29, p. 180. 13 columns. I.

THE NATURE OF THE VOLATILE MAT-
TER IN COAL. By H. C. Porter and
F. K. Ovitz. E & M. J., vol 86,
p 720. 6 columns.

ACTION OF SULPHUR IN A GAS COAL.
E. & M. J, vol. 87, p 897. $\frac{3}{4}$ col-
umn.

WHY SULPHUR ABOUNDS LOCALLY IN
CERTAIN COAL SHAMS. By J R
Heckman. E. & M. J, vol 86,
p. 14. 1 $\frac{1}{2}$ columns.

CHARACTERISTICS OF STEAM COAL
P. C. M. & M. Soc. S. A., vol. 7,
p. 353. 2 columns

CHARACTER OF CHILIAN COAL T. I.
M. E, vol. 38, p. 43. 2 pages.

WHAT IS COAL: A Commercial Defini-
tion. Min. & Sci. Press, vol. 101,
p. 663. 1 $\frac{1}{2}$ columns.

COMMERCIAL CLASSIFICATION OF FUELS.
M. & M, vol. 31, p. 397. 4 $\frac{1}{2}$ col-
umns.

FUEL AND ITS APPLICATION. Min
Mag., vol. 5, p. 499. 10 pages.

PURE COAL AS A BASIS FOR THE COM-
PARISON OF BITUMINOUS COALS.
By W. F. Wheeler. T. A. I. M. E.,
vol 38, p. 621. 12 pages. I.

PURE COAL AS A BASIS FOR THE COM-
PARISON OF BITUMINOUS COALS:
Discussion of the paper of W F.
Wheeler, Trans., vol. 38, p 621.
T. A. I. M. E., vol. 39, p. 800. 5 $\frac{1}{2}$
pages.

A REVIEW OF SOME RECENT SCHEMES
FOR THE CLASSIFICATION OF COALS.
By A. L. McCallum. J M Soc. N.
S., vol. 12, p 113. 4 pages.

CLASSIFICATION OF COAL By D. B.
Dowling J. C M I., vol. 11,
p. 220. 11 pages.

See also COAL ANALYSIS.

See also COST OF FUEL.

Decomposition of Coal

THE WEATHERING OF COALS. T. A.
I. M. E., vol. 40, p. 57. 4 pages.

WEATHERING OF COAL IN THE ARID
REGION OF THE GREEN RIVER BASIN,
SWEETWATER COUNTY, WYOMING.
By A. B. Schultz. U. S. G. S,
Bull. 381, p. 282. 15 pages. 1908.

See also GEOLOGIC PROGRESS AND
STUDIES.

WASTE OF COAL: Deterioration T.
A. I. M. E., vol. 38, p. 630. 3 pages.

DECOMPOSITION OF COAL P. C. M. &
M. Soc. S. A., vol. 9, p. 333. 1 col-
umn.

THE DETERIORATION OF COAL SAMPLES.
By W. S. Parr. M. & M., vol. 29,
p. 70. 3 $\frac{1}{2}$ columns. I.

See also SAMPLING COAL AND ORES.

THE OXIDATION OF COAL. By O.
Boudourd. E. & M. J., vol. 87, p.
995 2 $\frac{1}{2}$ columns

TEMPERATURE OF COAL PILES E. &
M. J, vol. 86, p. 862. $\frac{1}{4}$ column.

THE VARIABLE COLOR OF COAL ASH.
By W. P. Young E. & M J., vol.
86, p. 533. 3 columns.

See also TESTING FUELS AND THEIR
VALUE.

Coke: Its Properties and Manufacture

HEATING PROPERTIES OF COKE AND COAL. Min. Mag., vol. 10, p. 113. 11½ pages.

See also COMPOSITION AND CHARACTERISTICS OF COAL.

CHARCOAL AND COKE AS BLAST-FURNACE FUELS. By R. H. Sweetser. T. A. I. M. E., vol. 39, p. 228. 7½ pages. D

A PRACTICAL TEST FOR COKING COALS. By M. A. Pishel. E. & M. J., vol. 86, p. 479. 1½ columns.

See also TESTING FUELS AND THEIR VALUE.

GENESIS AND DEVELOPMENT OF THE COKING OVEN. By W. Galloway. E. & M. J., vol. 88, p. 11. 9 columns. I

AN ELONGATED COKE OVEN. By W. R. Elliott. M. & M., vol. 29, p. 352. 4½ columns. I.

THE MITCHELL PATENT COKE OVEN. By J. Fulton. M. & M., vol. 30, p. 247. 11 columns. I.

CONSTRUCTION OF THE MITCHELL PATENT COKE OVEN. M. & M., vol. 30, p. 249. 3 columns. I.

COKE OVENS IN SOUTHERN COLORADO COAL MINES. E. & M. J., vol. 88, p. 1013. 4 columns. I

COKE OVEN CONSTRUCTION IN MEXICO. M. & M., vol. 30, p. 129. 5 columns. I.

CONCRETE COKE-OVEN CONSTRUCTION. By E. A. Lee. M. & M., vol. 30, p. 429. 7½ columns. I.

A NEW SYSTEM OF MODERN COKE OVENS. By F. Fieschi. E. & M. J., vol. 86, p. 378. 10½ columns. I.

MINING, PREPARING AND COKING COAL, MARTING, WEST VIRGINIA. By E. B. Wilson. M. & M., vol. 31, p. 171. 7 columns. I.

MANUFACTURE OF COKE. By J. D. Weeks. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.

THE MANUFACTURE OF COKE IN NORTHERN WEST VIRGINIA. By J. W. Knowlton. E. & M. J., vol. 86, p. 426. 2½ columns.

MAKING COKE FROM INDIANA COAL. E. & M. J., vol. 85, p. 1103. 1½ columns.

JONES AND LAUGHLIN'S COKE PLANT. By A. L. Affelder. M. & M., vol. 29, p. 195. 9 columns. I

COKE-OVENS AT THE PLANT OF THE STAG CAÑON FUEL COMPANY, NEW MEXICO. T. A. I. M. E., vol. 40, p. 371. 2 pages. I.

RETORT COKE OVENS IN MEXICO. By E. B. Wilson. M. & M., vol. 31, p. 257. 8 columns. I.

THE CARBONIZATION OF COAL IN BY-PRODUCT COKE OVENS. By E. Lloyd. E. & M. J., vol. 88, p. 261. 3 columns. I

THE RECOVERY OF BY-PRODUCTS FROM THE DISTILLATION OF COAL, WITH SPECIAL REFERENCE TO THE KOPPERS NEW PROCESS. By A. V. Kochs. T. I. M. E., vol. 36, p. 326. 26 pages. I.

KOPPERS BY-PRODUCT COKE OVENS. By W. E. Hartman. M. & M., vol. 31, p. 185. 5 columns. I.

COMPARISON BETWEEN THE VALUE OF SURPLUS GAS FROM REGENERATOR BY-PRODUCT COKE OVENS AND STEAM PRODUCED BY THE WASTE-HEAT FROM BY-PRODUCT COKE OVENS, WITH SPECIAL REFERENCE TO THE EVENCE COPPLE NEW BY-PRODUCT OVENS. By M. H. Mills. T. I. M. E., vol. 37, p. 537. 16 pages. I.

See also TESTING FUELS AND THEIR VALUE.

FALCONE OVEN TILE-LAYING MACHINE. M. & M., vol. 31, p. 287. 2½ columns. I.

A NEW TILE-LAYING MACHINE FOR COKE OVENS. By B. Lloyd. M. & M., vol. 31, p. 187. ¾ column. I.

ELECTRICALLY OPERATED COKE-SQUEEZING MACHINES. By A. Gradenwitz. E. & M. J., vol. 87, p. 647. 4 columns. I.

BEEHIVE-OVEN LEVELING MACHINE M. & M., vol. 30, p. 594. 2 columns. I.

COAL-LEVELING MACHINE FOR BEEHIVE OVENS. E. & M. J., vol. 89, p. 578. 3 columns. I.

AN AUTOMATIC COKE WATERER. By W. L. Affelder. M. & M., vol. 30, p. 725. 3½ columns. I.

COKE DRAWING MACHINES. By W. W. Macfarren. P. E. Soc. W. Pa., vol. 23, p. 451. 66 pages. I.

THE PYROMETRY OF THE BEEHIVE COKE OVEN. By J. R. Campbell. E. & M. J., vol. 88, p. 120. 9 columns. I.

PYROMETRY OF BEEHIVE COKE OVENS. By J. R. Campbell. M. & M., vol. 30, p. 141. 6½ columns. I.

WASTE FROM BEEHIVE COKING. Min. & Sci. Press, vol. 97, p. 676. 1½ columns.

THE MEXICAN COKE INDUSTRY. By R. D. Martin. M. & M., vol. 30, p. 129. 6 columns. I.

THE PRODUCTION AND USE OF COKE. By W. Hartman. E. & M. J., vol. 89, p. 1162. 4 columns.

See also GAS FOR POWER.

See also COST OF FUEL.

Peat as a Fuel

PEAT. By H. H. Hindshaw. U. S. G. S., Mineral Resources, 1904.

PEAT DEPOSITS. By N. S. Shaler. U. S. G. S., 16th Ann. Rept., pt. 4, 9 pages.

THE UTILIZATION OF PEAT FOR INDUSTRIAL AND METALLURGICAL PURPOSES. By E. Nystrom. J. C. M. I., vol. 11, p. 231. 5 pages.

THE PREPARATION AND USE OF PEAT AS FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 442, p. 101. 32 pages. 1909.

THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 379, p. 63. 4 pages. 1908.

THE AMERICAN PEAT SOCIETY. E. & M. J., vol. 90, p. 254. 2 columns.

Power Generation by Oil

BURNING LIQUID FUEL WITHOUT STEAM OR COMPRESSED AIR. By R. Schott. Min. & Sci. Press, vol. 96, p. 851. 2½ columns.

A MODERN FUEL-OIL STORAGE SYSTEM. By H. W. Beecher. Min. & Sci. Press, vol. 97, p. 389. 2½ columns.

OIL VS. COAL AS A FUEL. E. & M. J., vol. 83, p. 247. 1 column.

OIL BURNERS FOR REVERBERATORY FURNACES. By C. F. Shelby. E. & M. J., vol. 89, p. 31. 4 columns. I.

See also COST OF FUEL.

Buying Coal

RESULTS OF PURCHASING COAL UNDER GOVERNMENT SPECIFICATIONS. By J. S. Burtows. U. S. G. S., Bull. 378, 44 pages, 1909; Bull. 428, 80 pages, 1910.

PURCHASE OF COAL ON SPECIFICATION. By J. E. Woodwell. M. & M., vol. 29, p. 63. 5 columns.

PURCHASE OF COAL BY B. T. U. METHOD. By S. A. Taylor. M. & M., vol. 30, p. 298. 5½ columns. I.

BUYING AND HANDLING STEAM COAL. M. & M., vol. 30, p. 352. 3½ columns.

THE PURCHASE OF COAL UNDER GOVERNMENT AND COMMERCIAL SPECIFICATIONS, ON THE BASIS OF ITS HEATING VALUE, WITH ANALYSES OF COAL DELIVERED UNDER GOVERNMENT CONTRACTS. By D. T. Randall. U. S. G. S., Bull. 339, 27 pages. I. 1908.

Gas for Power: Its Generation and Use

GAS POWER IN HIGH ALTITUDES. E. & M. J., vol 90, p. 1262. 4½ columns. I.

SUCTION GAS AND ITS APPLICATION TO MINING. By G. D. Stephen. E. & M. J., vol. 87, p. 1076 6 columns. I.

POWER PRODUCTION AT COLLIERIES, WITH SPECIAL REFERENCE TO GAS POWER AND ELECTRICAL CENTRALIZATION. By R. Crawford and H. Moores T. I. M. E., vol. 39, p. 501. 19 pages I.

See also **GENERAL APPLICATION OF POWER.**

A TARLESS OIL-GAS PRODUCER. By A. B. Davis. Min. & Sci. Press, vol. 100, p. 219. 5 columns. I.

UTILIZING BLAST FURNACE GASES AT GARY. E. & M. J., vol. 87, p. 20. 7½ columns.

POWER FROM COPPER BLAST-FURNACE GASES. By R. Schott. E. & M. J., vol. 87, p. 459. 5½ columns.

See also **METALLURGICAL PROCESSES AND WORKS.**

THE USE OF NATURAL GAS IN THE JOPLIN DISTRICT. By D. Brittain. E. & M. J., vol 86, p. 568. 7½ columns. I.

THE UTILIZATION OF FIREDAMP IN SARREBRUCK COALFIELDS E. & M. J., vol. 89, p. 430. ½ column.

THE BEGINNING OF THE USE OF NATURAL GAS FOR FUEL. By J. L. Cowan. Min. & Sci. Press, vol. 101, p. 44. 4 columns

See also **OCCURRENCE OF NATURAL GAS.**

THE USE OF COKE-OVEN GAS AS FUEL. By T. J. Brown. J. M. Soc. N. S., vol. 15, p. 1. 8 pages.

USE OF COKE-OVEN GAS AS FUEL. By T. J. Brown. M. & M., vol 30, p. 690. 3½ columns.

UTILIZATION OF BY-PRODUCT GASES FROM COKE OVENS. By H. M.

Payne. E. & M. J., vol 89, p 927. 2½ columns.

See also **COKE, ETC.**

THE PRESENT STATUS OF THE PRODUCER-GAS POWER PLANT IN THE UNITED STATES By R. H. Fernald U. S. G. S., Bull. 316, p 439. 22 pages. 1906.

A NEW GAS PRODUCER FOR LOW GRADE FUEL. By A. Gradenwitz. E. & M J., vol. 88, p. 1019. 3½ columns. I.

RECENT DEVELOPMENT OF THE PRODUCER-GAS POWER PLANT IN THE UNITED STATES By R. H. Fernald. U. S G. S, Bull. 416, 82 pages I. 1909.

A BITUMINOUS POWER GAS PRODUCER. By E. F. Bulmahn. P. E. Soc. W. Pa., vol. 25, p. 603. 19 pages I.

THE PRESENT STATUS OF THE PRODUCER-GAS POWER PLANT IN THE UNITED STATES. By R. H. Fernald. J. W. Soc. E., vol 12, p 551 58 pages. I.

PROCESSES FOR THE DISTILLATION AND PURIFICATION OF THE PRODUCTS OF COAL. By C. B. Mansfield Min. Mag, vol. 7, p. 1. 9 pages.

SULPHUR IN GASEOUS FUELS By F. Louis Grammer. T. A. I. M. E., vol. 39, p. 545 2½ pages.

THE VALUE OF GAS POWER. By C. E. Lucke. Sch. Mines Quart, vol 30, p. 199. 18 pages. I.

See also **TESTING FUELS AND THEIR VALUE.**

See also **COST OF FUEL.**

Fuel Substitutes, Etc.

COAL-DUST FIRING FOR REVERBERATORY FURNACES. By C. F. Shelby. E. & M J., vol. 85, p. 541. 9½ columns.

COAL DUST FIRING OF REVERBERATORY FURNACES. E. & M. J., vol. 85, p. 660. 1½ columns.

BURNING WOOD UNDER BOILERS. By E. G. Tilden. E & M J., vol. 87, p. 499. 2 columns. I

THE FIREWOOD SUPPLIES OF THE GOLD-FIELDS. By E. Kelso T. Au. I. M. E., vol. 8, pt. 1, p. 108. 4 pages.

THE AMOUNT OF WOOD IN A CORD. M. & M., vol. 30, p. 140. $\frac{1}{2}$ column.

CHARCOAL. The Blast Furnace Fuel of Ontario By R. H. Sweetzer. J. C. M. I., vol. 11, p. 165. 6 pages. I.

TAN BARK AS A BOILER FUEL. By D. M. Myers Sch. Mines Quart., vol. 31, p. 116. 27 $\frac{1}{2}$ pages. I.

THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S. G. S., Bull. 379, p. 63. 4 pages. 1908.

Briquetting of Fuels and Ores

CONDITION OF THE COAL-BRIQUETTING INDUSTRY IN THE UNITED STATES. By E. W. Parker. U. S. G. S., Bull. 316, p. 460. 26 pages. 1906.

COAL-BRIQUETTING IN THE UNITED STATES. By E. W. Parker. T. A. I. M. E., vol. 38, p. 581. 40 pages. I.

COAL BRIQUETTING AT HARTSHORNE, OKLAHOMA. By C. T. Malcomson. M. & M., vol. 29, p. 339. 7 $\frac{1}{2}$ columns. I.

COAL BRIQUETTING. By C. Scholz. J. W. Soc. E., vol. 14, p. 137. 18 pages. I

COAL BRIQUETTE PLANT AT BANKHEAD, ALBERTA, CANADA. By E. W. Parker. T. A. I. M. E., vol. 39, p. 236. 7 pages. I.

COAL-BRIQUETTE PLANT AT BANKHEAD, ALBERTA, CANADA: DISCUSSION OF THE PAPER OF E. W. PARKER, p. 236. T. A. I. M. E., vol. 39, p. 892. 4 $\frac{1}{2}$ pages.

PROGRESS IN FUEL BRIQUETTING. By R. Schorr. E. & M. J., vol. 89, p. 524. 5 columns. D.

A COMMERCIAL FUEL-BRIQUETTE PLANT. By W. H. Blauvelt. T. A.

I. M. E., vol. 41, p. 255, 13 pages, I.; p. 891, 9 $\frac{1}{2}$ pages

BINDERS FOR COAL BRIQUETTES. By J. E. Mills. U. S. G. S., Bull. 343. 56 pages. 1908.

LIGNITE BRIQUETTING IN GERMANY. By R. Schorr. E. & M. J., vol. 85, p. 460. 5 $\frac{1}{2}$ columns.

BRIQUETTING SLAG WITH COKE DUST. E. & M. J., vol. 89, p. 820. $\frac{1}{2}$ column.

PROGRESS WITH THE GRONDAL PROCESS OF CONCENTRATING AND BRIQUETTING IRON ORES. By P. McN Bennie. J. C. M. I., vol. 11, p. 189. 14 pages. I. Maps.

See also **TESTING FUELS AND THEIR VALUE.**

See also **COST OF FUEL.**

FUEL: Its Combustion and Economy By J. Sharpe. T. A. I. M. E., vol. 2, p. 106. 3 $\frac{1}{2}$ pages.

See also **CONSUMPTION AND WASTE OF COAL.**

NOTES ON FUEL ECONOMY, AND ITS APPLICATION TO NOVA SCOTIA. By A. A. Hayward. J. M. Soc. N. S., vol. 13, p. 1. 20 pages. D

OUR STEAM-COAL AND ITS USES. By Lees Knowles. T. I. M. E., vol. 36, p. 273. 13 pages.

Testing Fuels and Their Value

PITTSBURG TESTING STATION. M. & M., vol. 30, p. 233. 2 $\frac{1}{2}$ columns.

COAL-TESTING IN THE UNITED STATES. P. C. M. & M. Soc. S. A., vol. 7, p. 193. 4 columns.

See also **PREPARATION OF COAL.**

COMPARATIVE TESTS OF RUN-OF-MINE AND BRIQUETTED COAL. E. & M. J., vol. 87, p. 611. 2 $\frac{1}{2}$ columns.

REPORT ON THE OPERATIONS OF THE COAL-TESTING PLANT OF THE UNITED STATES GEOLOGICAL SURVEY AT THE LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, MISSOURI, 1904. By E. W. Parker, J. A.

214 FUELS: COAL, COKE, GAS, OIL, ETC., AND FUEL TESTING

- Holmes and others U. S. G. S., Professional Paper 48, 1492 pages. 1906.
- A STUDY OF FOUR HUNDRED STEAMING TESTS, MADE AT THE FUEL-TESTING PLANT, ST. LOUIS, MISSOURI. By L. P. Breckenridge U. S. G. S., Bull. 325 196 pages, 1907.
- WASHING AND COKING TESTS OF COAL AND CUPOLA TESTS OF COKE By R. Moldenke and others. U. S. G. S., Bull. 336. 76 pages. 1908.
- COMPARATIVE TESTS OF RUN-OF-MINE AND BRIQUETTED COAL ON LOCOMOTIVES, INCLUDING TORPEDO-BOAT TESTS AND SOME FOREIGN SPECIFICATIONS FOR BRIQUETTED FUEL By W. F. M. Goss. U. S. G. S., Bull. 363 57 pages. I. 1908.
- TESTS OF COAL AND BRIQUETTES AS FUEL FOR HOUSE-HEATING BOILERS. By D. T. Randall U. S. G. S., Bull. 366 44 pages. I. 1908
- COMPARATIVE TESTS OF RUN-OF-MINE AND BRIQUETTED COALS ON THE TORPEDO-BOAT BIDDLE. By W. T. Ray and H. Kreisenger. U. S. G. S., Bull. 403 49 pages. 1909
- TESTS OF RUN-OF-MINE AND BRIQUETTED COAL IN A LOCOMOTIVE BOILER. By W. T. Ray and H. Kreisenger. U. S. G. S., Bull. 412, 32 pages. 1909.
- TEST OF COAL BRIQUETTES. By W. F. M. Goss. M. & M., vol. 30, p. 433. 2 columns.
- BRIQUETTING TESTS AT UNITED STATES FUEL-TESTING PLANT, NORFOLK, VIRGINIA. By C. L. Wright U. S. G. S., Bull. 385. 41 pages. I. 1909.
- See also BRIQUETTING OF FUELS AND ORES.
- INCIDENTAL PROBLEMS IN GAS-PRODUCER TESTS. By R. H. Fernald and others. U. S. G. S., Bull. 393. 29 pages. 1909.
- See also GAS FOR POWER.
- COMMERCIAL DEDUCTIONS FROM COMPARISONS OF GASOLINE AND ALCOHOL TESTS ON INTERNAL COMBUSTION ENGINES By R. M. Strong U. S. G. S., Bull. 392 38 pages 1909
- THE SMOKELESS COMBUSTION OF COAL IN BOILER PLANTS. By D. T. Randall and H. W. Weeks U. S. G. S., Bull. 373. 188 pages. 1909.
- RULES FOR SMOKELESS CONSUMPTION OF FUELS By R. Grimshaw. E & M J., vol. 87, p. 1142. 2½ columns
- THE COMBUSTION OF COAL By J. A. Holmes. T. A. I. M. E., vol. 41, p. 244. 11½ pages.
- COMBUSTION OF COAL UPON GRATES By E. G. Bailey. E & M J., vol. 86, p. 184. 4 columns
- THE FUEL ECONOMY OF DRY BLAST. By R. S. Moore. M. & M., vol. 30, p. 263. 1½ columns. D.
- THE LIMIT OF FUEL-ECONOMY IN THE IRON BLAST-FURNACE. By N. M. Langdon. T. A. I. M. E., vol. 40, p. 614. 22 pages
- CALCULATION OF CALORIFIC POWER OF FUELS. P. C. M. & M. Soc. S. A., vol. 7, p. 417. ¾ column
- AN INITIAL COAL-SUBSTANCE WITH A CONSTANT THERMAL VALUE By S. W. Parr and W. F. Williams. Min. & Sci. Press, vol. 97, p. 501. 1½ columns.
- THE REAL VALUE OF STEAM COAL By D. T. Randall. E. & M. J., vol. 88, p. 565. 1½ columns.
- PRACTICAL FUEL VALUES. By W. P. Young. M. & M., vol. 31, p. 178 2½ columns
- A DETAILED STUDY OF PRACTICAL FUEL VALUES By W. P. Young. E & M. J., vol. 89, p. 14 4 columns.
- IGNITION POINTS OF WOOD AND COAL. P. C. M. & M. Soc. S. A., vol. 9, p. 134. ¾ column.
- IGNITION-POINTS OF WOOD AND COAL. By Henry Hall T. I. M. E., vol. 36, p. 2 6 pages.

- THE EFFECT OF OXYGEN IN COAL By D. White U. S. G. S., Bull. 382. 74 pages I 1909.
- EQUALIZATION OF FUELS. By H. K. Meyers M. & M., vol. 31, p. 405 3½ columns. D.
- BURNING THE SMALL SIZES OF ANTHRACITE FOR HEAT AND POWER PURPOSES By D. T. Randall. U. S. G. S., Bull. 378. 44 pages. 1909.
- GRAVITY DETERMINATION OF COAL. By A. G. Blakeley and E. M. Chance. M. & M., vol. 31, p. 499. 2 columns.
- See also THEORY OF CONCENTRATION.
- THE UTILIZATION OF FUEL IN LOCOMOTIVE PRACTICE. By W. F. M. Goss. U. S. G. S., Bull. 402. 28 pages 1909
- See also GAS FOR POWER.
- See also COST OF FUEL.

GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

Geological Surveys

- RECORDING GEOLOGICAL DATA By T. F. Field. M. & M., vol. 30, p. 14. 4 columns. I.
- GEOLOGY A Popular Lecture By J. F. Kemp Sch. Mines Quart., vol. 29, p. 125. 24 pages
- GEOLOGY Its Importance and Scope. By J. F. Kemp. Min. & Sci. Press, vol. 96, p. 497, 8 columns; p. 533, 7 columns
- ELEMENTARY GEOLOGY Min. Mag., vol. 1, p. 135 10 pages. I
- MODERN GEOLOGY. Min. Mag., vol. 1, p. 480. 9 pages.
- AMERICAN GEOLOGY Min. Mag., vol. 3, p. 392. 9½ pages
- NEED OF INSTRUMENTAL SURVEYING IN PRACTICAL GEOLOGY. By B. S. Lyman. T. A. I. M. E., vol. 40, p. 636. 8 pages. I.
- THE UNITED STATES GEOLOGICAL SURVEY. By R. H. Chapman J. C. M. I., vol. 13, p. 372. 24 pages. I
- THE UNITED STATES GEOLOGICAL SURVEY: Its Origin, Development, Organization, and Operation. U. S. G. S., Bull. 227. 205 pages I. 1904.
- WORK OF STATE GEOLOGICAL SURVEYS. By H. F. Bain. J. C. M. I., vol. 13, p. 364. 7½ pages.
- GEOGRAPHICAL DICTIONARY OF ALASKA. By M. Baker. U. S. G. S., Bull. 187. 446 pages. 1901.
- GEOGRAPHIC DICTIONARY OF ALASKA. By M. Baker U. S. G. S., Bull. 299. 690 pages. 1906.
- ALASKAN GEOGRAPHIC NAMES. By M. Baker. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 487-509 1899-1900.
- WORK OF THE GEOLOGICAL SURVEY OF CANADA. E. & M. J., vol. 85, p. 1105. 5 columns.
- GEOLOGICAL AND MINING NOTES ON CHINA By A. Hassam. T. I. M. E., vol. 36, p. 353. 12 pages
- A GEOGRAPHIC DICTIONARY OF CONNECTICUT. By H. Gannett. U. S. G. S., Bull. 117. 67 pages 1894.
- THE WORK OF THE STATE (ILLINOIS) GEOLOGICAL SURVEY. By H. F. Bain J. W. Soc. E., vol. 12, p. 233. 18 pages. I.
- A GEOGRAPHIC DICTIONARY OF MASSACHUSETTS. By H. Gannett. U. S. G. S., Bull. 116. 126 pages. 1894.
- A GEOGRAPHIC DICTIONARY OF NEW JERSEY By H. Gannett. U. S. G. S., Bull. 118. 131 pages 1894. I.
- BIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1886. By N. H. Darton U. S. G. S., Bull. 44 35 pages. 1887.
- BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY FOR 1908 By J. M. Nickles U. S. G. S., Bull. 409, 148 pages, 1909; Bull. 444, 174 pages, 1910.

RECORD OF NORTH AMERICAN GEOLOGY FOR 1807 TO 1889 INCLUSIVE. By N. H. Darton. U. S. G. S., Bull. 75, 173 pages, 1891; Bull. 91, 88 pages, 1891; Bull. 99, 73 pages, 1892

BOUNDARIES OF THE UNITED STATES AND THE SEVERAL STATES AND TERRITORIES, WITH A HISTORICAL SKETCH OF THE TERRITORIAL CHANGES By H. Gannett. U. S. G. S., Bull. 13. 135 pages. 1885

NOTES ON THE GEOLOGICAL SURVEYS OF VARIOUS COUNTRIES. By J. Stirling. T. Au. I. M. E., vol. 5, p. 192. 25 pages.

Geological Formations

NORTH AMERICAN GEOLOGIC FORMATION NAMES. By F. B. Weeks. U. S. G. S., Bull. 191. 448 pages. 1902.

THE NORTH AMERICAN CONTINENT DURING CAMBRIAN TIME By C. D. Walcott. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 523-568. 1890-91. I.

OBSERVATIONS ON THE JUNCTION BETWEEN THE EASTERN SANDSTONE AND THE KEWEENAW SERIES ON KEWEENAW POINT, LAKE SUPERIOR. By R. D. Irving and T. C. Chamberlain. U. S. G. S., Bull. 23. 124 pages. I. 1885

TERTIARY HISTORY OF THE GRAND CANYON DISTRICT, WITH ATLAS. By C. E. Dutton. U. S. G. S., Monograph II. 264 pages. I. 1882.

PRE-CAMBRIAN GEOLOGY OF NORTH AMERICA. By C. R. Van Hise and C. K. Leith. U. S. G. S., Bull. 360. 935 pages. I. 1909.

PLEISTOCENE GEOLOGY OF THE LEADVILLE QUADRANGLE, COLORADO By S. R. Copps. U. S. G. S., Bull. 386. 99 pages. I. 1909.

LIMESTONE IN WEST VIRGINIA. By G. P. Grimsley. E. & M. J., vol. 85, p. 1144. 3 columns.

THE COLORADO FORMATION AND ITS INVERTEBRATE FAUNA. By T. W. Stanton. U. S. G. S., Bull. 106. 288 pages. I. 1893.

THE LARAMIE AND THE OVERLYING LIVINGSTON FORMATION IN MONTANA. By W. H. Weed. U. S. G. S., Bull. 105. 68 pages. I. 1893.

PRELIMINARY PAPER ON AN INVESTIGATION OF ARCHEAN FORMATIONS OF NORTHWESTERN STATES. By R. D. Irving. U. S. G. S., 5th Ann. Rept., pp. 175-242. 1883-84. I.

OBSEDIAN CLIFF, YELLOWSTONE NATIONAL PARK. By J. P. Iddings. U. S. G. S., 7th Ann. Rept., pp. 249-295. 1885-86. I.

ON CLASSIFICATION OF EARLY CAMBRIAN AND PRE-CAMBRIAN FORMATIONS By R. D. Irving. U. S. G. S., 7th Ann. Rept., pp. 365-454. 1885-86. I.

STRUCTURE OF TRIASSIC FORMATION OF CONNECTICUT VALLEY. By W. M. Davis. U. S. G. S., 7th Ann. Rept., pp. 455-490. 1885-86. I.

QUATERNARY HISTORY OF MONA VALLEY, CALIFORNIA. By I. C. Russell. U. S. G. S., 8th Ann. Rept., pt. 1, pp. 261-394. 1886-87. I.

PLEISTOCENE HISTORY OF NORTHEASTERN IOWA. By W. J. McGee. U. S. G. S., 11th Ann. Rept., pt. 1, pp. 189-577. 1889-90. I.

THE LAFAYETTE FORMATION. By W. J. McGee. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 347-521. 1890-91. I.

THE POTOMAC FORMATION. By L. F. Ward. U. S. G. S., 15th Ann. Rept., pp. 307-397. 1893-94. I.

SOME ANALOGIES IN THE LOWER CRETACEOUS OF EUROPE AND AMERICA. By L. F. Ward. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 463-542. 1894-95. I.

THE TRIASSIC FORMATION OF CONNECTICUT. By W. M. Davis. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 1-192. 1896-97. I.

- TABLE OF NORTH AMERICAN TERTIARY HORIZONS.** By W. H. Dall U. S. G. S., 18th Ann. Rept., pt. 2, pp. 323-348. 1896-97.
- THE CRETACEOUS FORMATION OF THE BLACK HILLS AS INDICATED BY THE FOSSIL PLANTS** By L. F. Ward. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 521-946. 1897-98. I.
- THE DEVONIAN SYSTEM OF EASTERN PENNSYLVANIA AND NEW YORK** By C. S. Prosser. U. S. G. S., Bull. 120. 81 pages. I. 1894
- THE BEAR RIVER FORMATION AND ITS CHARACTERISTIC FAUNA** By C. A. White U. S. G. S., Bull. 128. 108 pages I. 1895.
- THE POTOMAC FORMATION IN VIRGINIA** By W. M. Fontaine. U. S. G. S., Bull. 145. 149 pages. I. 1896.
- THE INDEX-BEDS IN THE CARBONIFEROUS LIMESTONE SERIES OF SCOTLAND** By R. W. Dron. T. I. M. E., vol. 38, p. 383. 15 pages I.
- PRINCIPLES OF PRE-CAMBRIAN NORTH AMERICAN GEOLOGY.** By C. R. Van Hise U. S. G. S., 16th Ann. Rept., pt. 1, pp. 571-874. 1894-95. I.
- TERTIARY AND CRETACEOUS STRATA OF THE TUSCALOOSA, TANIGBEE AND ALABAMA RIVERS.** By E. A. Smith and L. C. Johnson U. S. G. S., Bull. 43. 189 pages. I. 1887
- LAKE BONNEVILLE.** By G. K. Gilbert U. S. G. S., Monograph I. 438 pages I. 1890.
- CONTRIBUTIONS TO HISTORY OF LAKE BONNEVILLE.** By G. K. Gilbert U. S. G. S., 2d Ann. Rept., pp. 167-200. 1880-81. I.
- FORMATION OF TRAVERTINE AND SILICEOUS SINTER BY THE VEGETATION OF THERMAL SPRINGS.** By W. H. Weed. U. S. G. S., 9th Ann. Rept., pp. 613-676. 1887-88. I.
- GENERAL ACCOUNT OF THE FRESH-WATER MORASSES OF THE UNITED STATES, WITH A DESCRIPTION OF THE DISMAL SWAMP DISTRICT OF VIRGINIA AND NORTH CAROLINA.** By N. S. Shaler. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 255-339. 1888-89. I.
- PRELIMINARY REPORT ON SEACOAST SWAMPS OF EASTERN UNITED STATES** By N. S. Shaler. U. S. G. S., 6th Ann. Rept., pp. 353-398. 1884-85.
- SKETCH OF GEOLOGICAL HISTORY OF LAKE LAHONTAN, A QUATERNARY LAKE OF NORTHWESTERN NEVADA.** By I. C. Russell. U. S. G. S., 3d Ann. Rept., pp. 189-235. 1881-82 I.
- TOPOGRAPHIC FEATURES OF LAKE SHORES.** By G. K. Gilbert. U. S. G. S., 5th Ann. Rept., pp. 69-123. 1883-84.
- THE EMERALDA FORMATION, A FRESH-WATER LAKE DEPOSIT.** By H. W. Turner. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 191-226. 1899-1900. I.
- MOUNDS FORMED BY MINERAL SPRINGS.** By F. L. Hess. Min. & Sci. Press, vol. 100, p. 675. 2 columns. I.
- THE HIGH PLAINS AND THEIR UTILIZATION.** By W. D. Johnson U. S. G. S., 21st Ann. Rept., pt. 4, pp. 601-741, 1899-1900, I; 22d Ann. Rept. pt. 4, pp. 631-669, 1900-1901, I
- Geology of Districts: General**
- THE GEOGRAPHY AND GEOLOGY OF ALASKA.** By A. H. Brooks. U. S. G. S., Professional Paper 45. 327 pages. I. 1906.
- GEOLOGY OF THE COPPER RIVER DISTRICT, ALASKA.** E. & M. J., vol. 85, p. 1275. 1 column.
- GEOLOGIC RECONNAISSANCE IN THE MATANUSKA AND TALKIETNA BASINS, ALASKA** By S. Paige and A. Knopf. U. S. G. S., Bull. 327. 71 pages. I. 1907.
- RECONNAISSANCE FROM FORT HAMLIN TO KOTZEBUE SOUND, ALASKA, BY WAY OF DALL, KANUTI, ALLEN AND KOWAK RIVERS.** By W. C.

- Mendenhall. U. S. G. S., Professional Paper 10. 68 pages. I. 1902.
- PRELIMINARY REPORT ON A RECONNAISSANCE ALONG CHANDLAR AND KOYUKUK RIVERS, ALASKA, IN 1899. By F. C. Schrader. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 441-486 1899-1900. I
- A RECONNAISSANCE IN NORTHERN ALASKA ACROSS THE ROCKY MOUNTAINS, ALONG KOYUKUK, JOHN, ANAKTUOUK, AND COLVILLE RIVERS, AND THE ARCTIC COAST TO CAPE LISBURNE IN 1901 By F. C. Schrader. U. S. G. S., Professional Paper 20. 139 pages I. 1904.
- OUTLINE OF THE GEOLOGY AND MINERAL RESOURCES OF THE ILLIAMA AND CLARK LAKES REGION. By G. C. Martin and F. J. Katz. U. S. G. S., Bull. 442, p. 179. 22 pages. I. 1909.
- GEOLOGY AND MINERAL RESOURCES OF THE BERNERS BAY REGION, ALASKA. By A. Knopf U. S. G. S., Bull. 446 58 pages. I.
- THE GEOLOGY AND MINERAL RESOURCES OF A PORTION OF THE COPPER RIVER DISTRICT, ALASKA. By F. C. Schrader and A. C. Spencer. U. S. G. S., Special Publications, 1901. 94 pages I.
- RECONNAISSANCE OF THE GEOLOGY AND MINERAL RESOURCES OF PRINCE WILLIAM SOUND, ALASKA. By U. S. Grant and D. F. Higgins. U. S. G. S., Bull. 443. 89 pages. I 1910
- GEOLOGY AND MINERAL RESOURCES OF THE SOLOMON AND CASADEPAGO QUADRANGLES, SEWARD PENINSULA, ALASKA. By P. S. Smith. U. S. G. S., Bull. 433. 234 pages. I.
- NOTES ON THE GEOLOGY AND MINERAL PROSPECTS IN THE VICINITY OF SEWARD, KENAI PENINSULA. By U. S. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 98. 10 pages. I. 1908
- GEOLOGY AND MINERAL RESOURCES OF IRON CREEK, ALASKA. By P. S. Smith. U. S. G. S., Bull. 314, p. 157. 7 pages. I. 1906.
- GEOLOGY AND MINERAL RESOURCES OF THE CONTROLLER BAY REGION, ALASKA. By G. C. Martin. U. S. G. S., Bull. 335. 141 pages I. 1908.
- GENERAL GEOLOGY, AND ECONOMIC GEOLOGY, ALASKA U. S. G. S., 21st Ann Rept, pt 2 522 pages. I.
- RECONNAISSANCE IN SOUTHWESTERN ALASKA IN 1898 By J. E. Spurr. U. S. G. S., 20th Ann. Rept., pt. 7, pp 31-264. 1898-99. I.
- RECONNAISSANCE IN SUSITNA BASIN AND ADJACENT TERRITORY, ALASKA. By C H Eldridge. U. S. G. S., 20th Ann Rept, pt. 7, pp. 1-29. 1898-99. Maps.
- See also ALASKA
- GEOLOGIC RECONNAISSANCE OF A PART OF WESTERN ARIZONA. By W. T. Lee. U. S. G. S., Bull. 352. 96 pages. I. 1908.
- See also ARIZONA.
- HISTORICAL SKETCH OF THE GEOLOGICAL RELATIONS OF AUSTRALIA AND TASMANIA. By R. M. Johnston. T. Au. I. M. E., vol. 3, p 256. 28 pages D.
- See also TASMANIA.
- SOME GEOLOGICAL CONSIDERATIONS AFFECTING WESTERN AUSTRALIAN ORE-DEPOSITS. By A. Montgomery. T. Au. I M E, vol. 13, p. 160. 32 pages I.
- THE ECONOMIC GEOLOGY OF NEW ZEALAND. By J. M. Bell. T. Au. I. M. E, vol. 13, p. 66. 20 pages. I. Map
- See also NEW ZEALAND.
- THE GEOLOGY AND ORE DEPOSITS OF FRANKLIN CAMP, BRITISH COLUMBIA. By R. W. Brock. J. C. M. I., vol 10, p 170. 10 pages. I.
- NOTES ON MOTHER LODE IN BRITISH COLUMBIA. By R. H. Allen. E. & M. J., vol. 88, p. 1101. 7 columns. I.
- OBSERVATIONS ON THE GEOLOGY AND ORE DEPOSITS OF CAMP HEDLEY,

- BRITISH COLUMBIA. By C. Cam-sell. J. C. M. I., vol. 11, p. 423. 10 pages. Maps.
- SIR WM. E. LOGAN AND THE GEOLOGICAL SURVEY OF CANADA. By R. Bell. J. C. M. I., vol. 10, p. 342 28 pages I.
- NOTES ON GEOLOGICAL STRUCTURE AT THE RICHARDSON MINE AS SHOWN BY PLANS AND MODELS OF THE SAME, UPPER SEAL HARBOUR, NOVA SCOTIA. By E. Percy Brown. J. M. Soc. N. S., vol. 13, p. 17. 10 pages. I.
- ORE DEPOSITS IN WESTERN ONTARIO. E. & M. J., vol. 90, p. 325. 3 columns.
- NORTH CAROLINA: Its Geology, Mining Regions, Scenery, Etc. By J. Eights. Min. Mag., vol. 10, p. 183, 5½ pages; p. 268, 5 pages; p. 369, 4½ pages; p. 423, 4 pages.
- See also THE CAROLINAS
- GEOLOGICAL AND MINING NOTES ON CHINA. By A. Hassam. T. I. M. E., vol. 36, p. 353. 12 pages.
- See also CHINA.
- DESCRIPTIVE GEOLOGY OF NEVADA SOUTH OF THE FORTIETH PARALLEL AND ADJACENT PORTIONS OF CALIFORNIA. By J. E. Spurr. U. S. G. S., Bull. 208. 229 pages. I. 1903
- NOTES ON THE GEOLOGY OF NORTHERN CALIFORNIA. By J. S. Diller. U. S. G. S., Bull. 33. 23 pages. 1886.
- GEOLOGY OF SAN CLEMENTS ISLAND, CALIFORNIA. By W. S. T. Smith. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 459-496. 1896-97. I.
- SKETCH OF GEOLOGY OF SAN FRANCISCO PENINSULA. By A. C. Lawson. U. S. G. S., 15th Ann. Rept., pp. 399-476. 1893-94. I.
- HISTORICAL GEOLOGY OF CALIFORNIA. By W. Forstner. Min. & Sci. Press, vol. 98, p. 853, 10½ columns, I.; p. 891, 4 columns, I.; vol. 99, p. 55, 6½ columns; p. 91, 3½ columns.
- See also CALIFORNIA.
- GEOLOGICAL DISTRIBUTION OF THE PRECIOUS METALS IN COLORADO. By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 89, 11 columns, I.; p. 150, 8 columns, I.; p. 316, 9½ columns, I.
- NOTES ON THE ECONOMIC GEOLOGY OF SOUTHEASTERN GUNNISON COUNTY, COLORADO. By J. M. Hill. U. S. G. S., Bull. 380, p. 21. 20 pages. I. 1908.
- ON GEOLOGY AND PHYSIOGRAPHY OF A PORTION OF NORTHWESTERN COLORADO AND ADJACENT PARTS OF UTAH AND WYOMING. By C. A. White. U. S. G. S., 9th Ann. Rept., pp. 677-712. 1887-88. I.
- GEOLOGY OF THE BOULDER DISTRICT, COLORADO. By N. M. Fenneman. U. S. G. S., Bull. 265. 101 pages. 1905.
- GEOLOGY OF THE DENVER BASIN IN COLORADO. By S. F. Emmons. U. S. G. S., Monograph XXVII. 556 pages. I. 1896.
- GEOLOGICAL SECTION OF LEADVILLE, COLORADO. Min. & Sci. Press, vol. 96, p. 60. I.
- See also COLORADO.
- GEOLOGICAL RECONNAISSANCE ACROSS IDAHO. By G. H. Eldridge. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 211-276. 1894-95. I.
- NOTES ON GEOLOGY OF SNOW STORM MINE, IDAHO. By G. Huston. E. & M. J., vol. 90, p. 1109. 3 columns.
- ORE BODIES OF THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 86, p. 67. 4 columns I.
- THE OREBODIES OF THE BUNKER HILL AND SULLIVAN MINE. Min. & Sci. Press, vol. 97, p. 775. 6 columns. I.
- GEOLOGY OF THE NORTH SIDE OF THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 86, p. 66. 2 columns.
- See also IDAHO.
- GEOLOGY OF JAMAICA, AS RELATED TO ITS HISTORY. By R. W. Raymond. Min. & Sci. Press, vol. 95, p. 145. 3½ columns.

- THE GEOLOGY OF THE FORT RILEY MILITARY RESERVATION AND VICINITY, KANSAS.** By R. Hay. U. S. G. S., Bull. 137. 35 pages. I. 1896.
- A GEOLOGICAL RECONNAISSANCE IN SOUTHWESTERN KANSAS.** By R. Hay. U. S. G. S., Bull. 57. 42 pages. I. 1890.
- See also KANSAS
- ECONOMIC GEOLOGY OF THE IOLA QUADRANGLE, KANSAS** By G. I. Adams, E. Haworth, and W. R. Crane. U. S. G. S., Bull. 238. 83 pages. I. 1904.
- ECONOMIC GEOLOGY OF THE INDEPENDENCE QUADRANGLE, KANSAS.** By F. C. Schrader and E. Haworth. U. S. G. S., Bull. 296. 74 pages. I. 1906.
- CONTRIBUTIONS TO THE GEOLOGY OF MAINE.** By H. S. Williams and H. E. Gregory. U. S. G. S., Bull. 165. 212 pages. I. 1900.
- THE GEOLOGY OF THE PERRY BASIN IN SOUTHEASTERN MAINE.** By G. O. Smith. U. S. G. S., Professional Paper 35. 107 pages. I. 1905
- GEOLOGY OF THE ISLAND OF MOUNT DESERT, MAINE** By N. S. Shaler. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 987-1061. 1886-87. I.
- See also MAINE.
- THE EOCENE DEPOSITS OF THE MIDDLE ATLANTIC SLOPE IN DELAWARE, MARYLAND, AND VIRGINIA.** By W. B. Clark. U. S. G. S., Bull. 141. 167 pages. I. 1896.
- THE GEOLOGY OF EASTERN BERKSHIRE COUNTY, MASSACHUSETTS.** By B. K. Emerson. U. S. G. S., Bull. 159. 139 pages. I. 1899.
- GEOLOGY OF OLD HAMPSHIRE COUNTY, MASSACHUSETTS, AND OTHERS.** By B. K. Emerson. U. S. G. S., Monograph XXIX. 790 pages. I. 1898.
- GEOLOGY OF CAPE ANN, MASSACHUSETTS** By N. S. Shaler. U. S. G. S., 9th Ann. Rept., pp. 529-611. 1887-88. I.
- GEOLOGY OF CAPE COD, MASSACHUSETTS.** By N. S. Shaler. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 497-594. 1896-97. I.
- See also MASSACHUSETTS.
- GROWTH AND DECAY OF THE MEXICAN PLATEAU** By R. T. Hill. E. & M. J., vol. 85, p. 681. 22½ columns. I.
- GEOLOGIC STUDY OF THE SIERRA OF GUANAJUATO.** E. & M. J., vol. 88, p. 672. 12 columns. I.
- HOSTOTIPAQUILLO AND THE LERMA RIVER, MEXICO.** By E. Ordoñez. Min. & Sci. Press, vol. 97, p. 705. 7½ columns. I.
- GEOLOGY OF NORTHERN MEXICO** By R. H. Barrows. Min. & Sci. Press, vol. 99, p. 290, 10 columns, I.; p. 324, 8 columns, I.
- A GEOLOGICAL JOURNEY IN GUERRERO, MEXICO.** By J. W. Finch. Min. & Sci. Press, vol. 101, p. 496. 9 columns.
- GEOLOGICAL NOTES ON WEST COAST OF MEXICO** By C. W. Botsford. E. & M. J., vol. 89, p. 223. 6 columns.
- See also MEXICO.
- THE PENOCHEE IRON-BEARING SERIES OF MICHIGAN AND WISCONSIN.** By R. D. Irving and C. R. Van Hise. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 341-507. 1888-89. I.
- GEOLOGY AND MINERAL RESOURCES OF MISSISSIPPI.** By A. F. Crider. U. S. G. S., Bull. 283. 99 pages. I. 1906.
- A SKETCH OF THE GEOLOGY OF THE STATE OF MISSISSIPPI.** By O. M. Lieber. Min. Mag., vol. 3, p. 41. 5 pages. I.
- See also MISSISSIPPI.
- GEOLOGY OF MISSOURI.** By J. Hawes. Min. Mag., vol. 5, p. 382. 12½ pages.
- NOTES ON THE MINERAL DEPOSITS OF THE BEARPAW MOUNTAINS, MON-**

- TANA. By L J. Pepperberg. U S. G. S., Bull. 430, p. 135. 12 pages I. 1909.
- GEOLOGY AND PALEONTOLOGY OF THE JUDITH RIVER BEDS By T. W. Stanton and J. B. Hatcher. U. S. G. S., Bull. 257 174 pages. I. 1905
- See also MONTANA.
- SOME ORE DEPOSITS OF MAINE AND THE MILAN MINE, NEW HAMPSHIRE. By W H Emmons. U. S. G. S., Bull 432 62 pages I.
- GEOLOGY OF THE MOGOLLONS, NEW MEXICO. E. & M J, vol. 88, p. 63 1½ columns.
- See also NEW MEXICO
- THE RENSSELAER GRIT PLATEAU IN NEW YORK By T N Dale. U S. G. S., 13th Ann Rept., pt 2, pp. 291-340 1891-92 I.
- THE ECONOMIC GEOLOGY OF NORTHERN NEW YORK. By F S. Mills. E & M. J., vol. 85, p. 396. 7 columns. I.
- GEOLOGY OF THE HUDSON VALLEY BETWEEN THE HOOSIC AND THE KINDERHOOK By T. N. Dale U. S. G. S, Bull. 242 63 pages. I. 1904.
- THE CONFIGURATION OF THE ROCK FLOOR OF GREATER NEW YORK By W. H. Hobbs. U S G. S., Bull. 270 96 pages. I 1905
- See also NEW YORK.
- NOTES ON THE GEOLOGY OF SOUTHWESTERN IDAHO AND SOUTHEASTERN OREGON. By I. C. Russell. U S G S, Bull. 217. 83 pages. I 1903.
- GEOLOGICAL RECONNAISSANCE IN NORTHWESTERN OREGON. By J. S. Diller. U. S. G. S., 17th Ann. Rept., pt. 1, pp. 441-520. 1895-96 I.
- GEOLOGICAL RECONNAISSANCE IN SOUTHERN OREGON. By I C Russell. U. S. G. S, 4th Ann. Rept., pp. 431-464 1882-83. I.
- See also OREGON.
- DESCRIPTION OF THE GEOLOGY OF THE SCHUYLKILL COUNTY, PENNSYLVANIA. By P. W. Sheaffer. Min. Mag, vol. 2, p. 626. 4½ pages.
- See also PENNSYLVANIA.
- ECONOMIC GEOLOGY OF THE AMITY QUADRANGLE IN EASTERN WASHINGTON COUNTY, PENNSYLVANIA By F. G Clapp. U S G S, Bull. 300. 145 pages. I. 1907
- ECONOMIC GEOLOGY OF THE BEAVER QUADRANGLE, PENNSYLVANIA. By L. H Woolsey. U S. G. S., Bull. 286. 132 pages. I. 1906.
- GENERAL GEOLOGY OF THE PHILIPPINES. U. S G S, 21st Ann. Rept., pt. 3, p. 644, 1899-1900, I; pt. 3, pp. 487-628, I
- See also THE PHILIPPINES
- PHYSIOGRAPHY OF THE CHATTANOOGA DISTRICT IN TENNESSEE, GEORGIA, AND ALABAMA By C. W. Hayes U. S. G S, 19th Ann. Rept., pt. 2, pp 1-58. 1897-98 I.
- See also GEORGIA and ALABAMA.
- A SKETCH OF THE GEOLOGY OF TENNESSEE. By R. O Currey. Min. Mag., vol 9, p. 34. 10 pages.
- See also TENNESSEE.
- THE PRESENT CONDITION OF KNOWLEDGE OF THE GEOLOGY OF TEXAS. By R T. Hill U S. G. S, Bull 45. 95 pages. 1887.
- GEOLOGY OF THE BLACK AND GRAND PRAIRIES, TEXAS. By R. T Hill. U. S. G. S., 21st Ann. Rept., pt. 7. 666 pages. 1899-1900. I.
- GEOLOGY OF PORTIONS OF THE EDWARDS PLATEAU AND RIO GRANDE PLAIN ADJACENT TO SAN ANTONIO, TEXAS By R T Hill and T. W. Vaughn. U. S G. S., 18th Ann. Rept., pt 2, pp. 193-322 1896-97. I.
- See also TEXAS.
- GEOLOGY OF THE RICHMOND BASIN, VIRGINIA. By N. S Shaler. U. S. G. S., 19th Ann Rept., pt 2, pp 385-519. 1897-98. I.
- See also VIRGINIA.
- CONTRIBUTIONS TO THE GEOLOGY OF WASHINGTON. Geology and Physiography of Central Washington. By

222 GEOLOGY, MINERAL AND FOSSIL FUEL DEPOSITS

- G. O. Smith. U. S. G. S., Professional Paper 19. 101 pages. I. 1903.
- A GEOLOGICAL RECONNAISSANCE IN CENTRAL WASHINGTON. By I. C. Russell. U. S. G. S., Bull 108. 108 pages. I. 1893.
- See also WASHINGTON.
- NOTES ON SOME ORE DEPOSITS OF PORTO RICO. By S. H. Hamilton. E. & M. J., vol 88, p 518. 4 columns I.
- GEOLOGIC SECTION ALONG THE NEW AND KANAWHA RIVERS IN WEST VIRGINIA. By M. R. Campbell and W. C. Mendenhall. U. S. G. S., 17th Ann. Rept., pt. 2, pp. 473-511. 1895-96. I
- See also WEST VIRGINIA.
- ECONOMIC GEOLOGY OF THE KENOVA QUADRANGLE (KENTUCKY-OHIO-WEST VIRGINIA). By W. C. Phalen. U. S. G. S., Bull. 349. 158 pages. I. 1908.
- GEOLOGY OF WISCONSIN By J. G. Percival Min Mag., vol. 4, p 345, 18 pages; vol. 5, p. 113, 14 pages; p. 217, 12 pages.
- GEOLOGY AND MINERAL RESOURCES OF THE LARAMIE BASIN, WYOMING. By N. H. Darton and C. E. Siebenthal. U. S. G. S., Bull. 364. 81 pages. I. 1909.
- A GEOLOGICAL RECONNAISSANCE IN NORTHWEST WYOMING. By G. H. Eldridge. U. S. G. S., Bull. 119. 72 pages. I. 1894.
- See also WYOMING.
- PHYSICAL GEOLOGY OF GRAND CANYON DISTRICT. By C. E. Dutton U. S. G. S., 2d Ann. Rept., pp 47-166. 1880-81. I
- MOUNT TAYLOR AND THE ZUÑI PLATEAU. By C. E. Dutton. U. S. G. S., 6th Ann. Rept., pp. 105-198. 1884-85 I.
- GEOLOGY OF HEAD OF CHESAPEAKE BAY By W. J. McGee. U. S. G. S., 7th Ann. Rept., pp. 537-646. 1885-86. I.
- GEOLOGY OF THE CATOCHIN BELT. By A. Keith. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 285-395. 1892-93. I.
- FURTHER CONTRIBUTIONS TO GEOLOGY OF SIERRA NEVADA. By H. W. Turner. U. S. G. S., 17th Ann. Rept., pt. 1, pp. 521-762. 1895-96. I.
- SOME NOTES ON THE ECONOMIC GEOLOGY OF THE SKIENA RIVER. By W. W. Leach. J. C. M. I., vol. 10, p 218. 11 pages. Map.
- THE GEOLOGY OF NANTUCKET. By N. S. Shaler U. S. G. S., Bull 53. 55 pages. I. 1889.
- GEOLOGY OF THE NARRAGANSETT BASIN By N. S. Shaler and others. U. S. G. S., Monograph XXXIII. 202 pages. I. 1899
- GEOLOGY OF THE YELLOWSTONE NATIONAL PARK. By J. P. Iddings, W. H. Weed, C. D. Wolcott and others. U. S. G. S., Monograph XXXII. 893 pages I 1899.
- PRELIMINARY REPORT ON THE GEOLOGY OF NEBRASKA WEST OF THE ONE HUNDRED AND THIRD MERIDIAN. By N. H. Darton. U. S. G. S., Professional Paper 17. 69 pages. I. 1903.
- REPORT ON GEOLOGY OF MARTHAS VINEYARD. By N. S. Shaler. U. S. G. S., 7th Ann. Rept., pp. 297-363. 1885-86. I.
- GEOLOGY OF LASSEN PEAK DISTRICT. By J. S. Diller U. S. G. S., 8th Ann. Rept., pt. 1, pp. 395-432. 1886-87. I.
- THE GEOLOGY OF THE LITTLE WHIN SILL, WEARDALE, COUNTY DURHAM. By W. M. Egglestone. T. I. M. E., vol. 39, p. 18 33½ pages. I.
- YOGO, AND OTHER DISTRICTS. By W. H. Weed U. S. G. S., 20th Ann. Rept., pt 3, pp. 257-581. 1898-99. I.
- See also SOURCE AND SUPPLY OF WATER

Glaciers

- EXISTING GLACIERS OF THE UNITED STATES.** By I. C. Russell U. S. G. S., 5th Ann. Rept., pp 303-355. 1883-84. I.
- GLACIER BAY AND ITS GLACIERS, ALASKA** By H. F. Reid. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 415-461. 1894-95. I
- GLACIERS OF MOUNT RAINIER.** By I. C. Russell U. S. G. S., 18th Ann. Rept., pt 2, pp. 349-424. 1896-97. I
- GLACIAL SCULPTURE OF BIGHORN MOUNTAINS, WYOMING.** By F. E. Matthes U. S. G. S., 21st Ann. Rept., pt. 2, pp 167-190. 1899-1900. I.
- THE YAKUTAT BAY REGION, ALASKA: Physiography and Glacial Geology.** By R. S. Tarr. U. S. G. S., Professional Paper 64. 133 pages I. 1909.
- GLACIAL BRICK CLAYS OF RHODE ISLAND AND SOUTHEASTERN MASSACHUSETTS.** By N. S. Shaler U. S. G. S., 17th Ann. Rept., pt. 1, pp. 951-1004. 1895-96. I.
- THE GLACIAL BOUNDARY IN WESTERN PENNSYLVANIA, OHIO, KENTUCKY, INDIANA, AND ILLINOIS** By G. F. Wright. U. S. G. S., Bull. 58. 112 pages. I. 1890.
- DELAWARE LOBE OF THE LAKE MICHIGAN GLACIER OF THE WISCONSIN STAGE OF GLACIATION AND ASSOCIATED PHENOMENA.** By W. C. Alden. U. S. G. S., Professional Paper 34. 106 pages. I. 1905.
- GEOLOGICAL HISTORY OF LAKE LAHONTAN, A QUATERNARY LAKE OF NORTHWESTERN NEVADA.** By I. C. Russell U. S. G. S., Monograph XI. 288 pages I. 1885.
- THE GLACIAL LAKE AGASSIZ.** By W. Upham. U. S. G. S., Monograph XXV. 658 pages. I. 1896.
- THE UPPER BEACHES AND DELTAS OF THE GLACIAL LAKE AGASSIZ.** By W. Upham. U. S. G. S., Bull. 39. 84 pages I. 1887.
- GLACIATION OF THE YELLOWSTONE VALLEY NORTH OF THE PARK.** By W. H. Weed. U. S. G. S., Bull. 104. 41 pages. I. 1893.
- GLACIAL FORMATIONS AND DRAINAGE FEATURES OF THE ERIE AND OHIO BASINS.** By F. Leverett. U. S. G. S., Monograph XLI. 802 pages. I. 1902.
- CHANGES IN RIVER COURSES IN WASHINGTON TERRITORY DUE TO GLACIATION.** By B. Willis. U. S. G. S., Bull. 40. 10 pages. I. 1887.
- THE MONTANA LOBE OF THE KEWATIN ICE SHEET.** By F. H. H. Calhoun. U. S. G. S., Professional Paper 50. 62 pages I. 1906
- THE ILLINOIS GLACIAL LOBE.** By F. Leverett. U. S. G. S., Monograph XXXVIII. 817 pages. I. 1899.
- THE MORAINES OF SOUTHEASTERN SOUTH DAKOTA AND THEIR ATTENDANT DEPOSITS.** By J. E. Todd. U. S. G. S., Bull. 158. 171 pages. I. 1899.
- PRELIMINARY PAPER ON TERMINAL MORAINES OF SECOND GLACIAL EPOCH** By T. C. Chamberlin. U. S. G. S., 3d Ann. Rept., pp. 291-402. 1881-82 I.
- PRELIMINARY PAPER ON DRIFTLESS AREA OF UPPER MISSISSIPPI VALLEY.** By T. C. Chamberlin and R. D. Salisbury. U. S. G. S., 6th Ann. Rept., pp. 199-322. 1884-85. I.
- THE MORAINES OF THE MISSOURI COTEAN AND THEIR ATTENDANT DEPOSITS.** By J. E. Todd. U. S. G. S., Bull. 144. 71 pages. I. 1896.
- VALUE OF GEOLOGICAL WORK IN LIMESTONE REGIONS.** By C. T. Rice. E & M. J., vol 90, p 1161. 8 columns.
- THE GLACIAL GRAVELS OF MAINE AND THEIR ASSOCIATED DEPOSITS.** By G. H. Stone. U. S. G. S., Monograph XXXIV. 499 pages. I 1899.

ROCK SCORINGS OF THE GREAT ICE INVASIONS. By T. C. Chamberlin. U. S. G. S., 7th Ann. Rept., pp. 147-248. 1885-86. 1.

Geology of Fuel and Ores

GEOLOGY OF NEVADA'S NEW GOLD CAMP—ALUNITE. E. & M. J., vol 86, p 1203. 5 columns.

MANJAK AS WORKED AT THE VISTABELLA MINE, TRINIDAD. By J. C. T. Raspass. T. I. M. E., vol. 36, p. 119. 5 pages

See also OCCURRENCE OF ASPHALT.

GEOLOGY OF THE VIRGINIA BARITE-DEPOSITS. By T. L. Watson. T. A. I. M. E., vol. 38, p. 710. 24 pages. I.

See also OCCURRENCE OF BARITE.

STRATIGRAPHY OF THE BITUMINOUS COAL FIELD OF PENNSYLVANIA, OHIO AND WEST VIRGINIA. By I. C. White. U. S. G. S., Bull. 65. 212 pages. I. 1891.

GEOLOGY OF THE GREAT FALLS COAL FIELD OF MONTANA. By C. A. Fisher. U. S. G. S., Bull. 356. 87 pages. I. 1909

GEOLOGY OF THE LEWISTON COAL FIELD, MONTANA. By W. R. Calvert. U. S. G. S., Bull. 390. 83 pages. I. 1909.

GEOLOGY OF THE WEST VIRGINIA COAL-FIELDS. M. & M., vol. 29, p 303 6 columns.

GEOLOGY OF THE LA VITA COAL FIELD. By A. Lakes. M. & M., vol. 31, p. 466. 5½ columns. I

GEOLOGY OF HERRIN QUADRANGLE. By T. E. Savage. M. & M., vol 31, p. 527. 9½ columns. I.

See also OCCURRENCE OF COAL.

GEOLOGY OF THE CENTRAL COPPER REGION, ALASKA. By W. C. Mendenhall. U. S. G. S., Professional Paper 41. 133 pages. I. 1906

GEOLOGY OF THE GLOBE-KELVIN DISTRICT, ARIZONA. E. & M. J., vol. 89, p. 870. 5 columns.

GEOLOGY OF THE GLOBE-KELVIN DISTRICT, ARIZONA. E. & M. J., vol 89, p. 769. 5 columns.

GEOLOGY AT GLOBE, ARIZONA. By F. L. Ransome. Min. & Sci Press, vol. 100, p. 256. 4 columns.

GEOLOGY OF THE FIELD (MOUNT LYELE) AND ITS MINES: Copper. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 54. 7½ pages.

GEOLOGY OF THE COPPER DEPOSITS NEAR MONTEPELIER, BEAR LAKE COUNTY, IDAHO. By H. S. Gale. U. S. G. S., Bull. 430, p. 112 9 pages. I. 1909.

GEOLOGY OF THE RAY MINES, NEVADA. M. & M., vol. 29, p 544 1½ columns

See also OCCURRENCE OF COPPER.

GEOLOGY OF THE ARKANSAS DIAMOND FIELDS. E. & M. J., vol. 87, p. 153. 3 columns.

GEOLOGY OF THE BAHIA DIAMOND FIELDS, BRAZIL. E. & M. J., vol 87, p. 982 10 columns I.

See also OCCURRENCE OF DIAMONDS.

THE GEM BEARING PEGMATITES OF WESTERN MAINE. By W. R. Wade. E. & M. J., vol. 87, p. 1127. 7½ columns. I.

GEOLOGY OF GEM DEPOSITS. By E. S. Bastin. U. S. G. S., Bull. 445. 152 pages. I. 1911.

SKETCH OF THE GEOLOGY OF THE NORTHEASTERN PART OF THE FAIRBANKS QUADRANGLE, ALASKA. By L. M. Prindle. U. S. G. S., Bull. 442. p. 203 6 pages. I. 1909

THE INDICATORS OF THE DAYLESFORD GOLD MINES, VICTORIA. By W. H. Vale. T. Au. I. M. E., vol 10, p. 340 12 pages. I.

THE GEOLOGY OF NORTHWESTERN TASMANIA, AUSTRALIA. T. Au. I. M. E., vol. 10, p. 38. 2½ pages.

"INDICATORS" IN AUSTRALIAN MINES. By W. Bradford. T. Au. I. M. E., vol. 4, p. 121. 2½ pages. I.

- CONTACTS IN VICTORIAN MINES. By W. H. Ferguson. T. A. I. M. E., vol 6, p. 34. 2 pages.
- GEOLOGY OF THE CENTRE STAR MINES, BRITISH COLUMBIA. E & M. J., vol. 89, p 17. 2 columns
- GEOLOGY OF THE EXPOSED TREASURE LODE, MOJAVE, CALIFORNIA. By C. De Kalb. T. A. I. M. E., vol. 38, p 310. 10 pages. I.
- GEOLOGY OF THE YELLOW ASTER MINE, CALIFORNIA. By W. H. Storms. E. & M. J., vol. 87, p. 1277. 12 columns. I.
- NOTES ON THE GEOLOGY OF THE PORCUPINE DISTRICT. E. & M. J., vol 90, p. 348. 2½ columns Map.
- GENETIC AND STRUCTURAL RELATIONS OF THE EASTERN GOLD-BELT OF NORTH CAROLINA. T. A. I. M. E., vol 38, p 851. 4 pages.
- GEOLOGY OF THE FALL RIVER ORE DEPOSITS, COLORADO. M. & M., vol. 29, p. 294 1½ columns.
- GEOLOGY OF RAWHIDE DISTRICT, NEVADA. E. & M. J., vol. 87, p. 345. 1 column.
- THE GEOLOGICAL AND PHYSICAL CONDITION OF TONOPAH MINES. By W. P. Jenney E. & M. J., vol. 89, p 29. 3½ columns.
- GEOLOGY OF THE JARBRIDGE MINING DISTRICT. By N. W. Sweetser. Min. & Sci. Press, vol 101, p. 871. 2½ columns. I.
- A TERTIARY RIVER CHANNEL NEAR CARSON CITY, NEVADA. By J. A. Reid. Min & Sci Press, vol. 96, p 522. 7½ columns. I.
- GEOLOGICAL POSSIBILITIES AT GOLD-FIELD. By A. Becker. Min & Sci. Press, vol. 96, p. 846. 2 columns. I.
- GEOLOGY OF THE MANHATTAN DISTRICT, NEVADA. By W. P. Jenney. E. & M. J., vol. 88, p. 82. 6 columns.
- REPORT ON GEOLOGY OF EUREKA DISTRICT, NEVADA. By A. Hague. U. S. G. S., 3d Ann. Rept., pp. 237-290. 1881-82. I.
- GEOLOGY OF THE TONOPAH MINING DISTRICT, NEVADA. By J. E. Spurr. U. S. G. S., Professional Paper 42, 295 pages. I. 1905.
- GEOLOGY OF THE FORTUNA MINE, BINGHAM, UTAH E & M. J., vol. 86, p 1191 7 columns.
- GEOLOGY OF THE FRENCH GUIANA GOLDFIELDS. T. A. I. M. E., vol. 41, p 574. 1 page.
- GEOLOGY OF KOLAR GOLD FIELD. By C. S. Durand. M. & M., vol. 31, p. 350. 2½ columns.
- THE GEOLOGY OF THE COFFEE CREEK MINING DISTRICT. By N. S. Stines. Min. & Sci. Press, vol. 95, p. 25. 2½ columns
- See also OCCURRENCE OF GOLD.
- GEOLOGY OF THE LORRAINE OOLITIC IRON ORE DEPOSITS, FRANCE. E. & M. J., vol 87, p 1222. 6 columns I.
- THE GEOLOGICAL RELATIONS OF THE SCANDINAVIAN IRON-ORES. By H. Sjogren T. A. I. M. E., vol. 38, p. 766. 69 pages. I.
- See also OCCURRENCE OF IRON ORES.
- GEOLOGY OF THE SOUTHEAST MISSOURI LEAD DISTRICT. By H. A. Wheeler. E. & M. J., vol. 89, p. 465. 4½ columns.
- GEOLOGY OF THE ORE DEPOSITS OF THE CŒUR D'ALENE DISTRICT, IDAHO. E. & M. J., vol. 88, p. 1056. 9 columns I.
- REPORT ON GEOLOGY AND MINING INDUSTRY OF LEADVILLE, COLORADO. By S. F. Emmons. U. S. G. S., 2d Ann. Rept., pp 201-290. 1880-81. I.
- See also OCCURRENCE OF LEAD
- THE GEOLOGY OF PETROLEUM. M & M., vol. 31, p. 607 4½ columns I.
- GEOLOGY OF OIL AND GAS. By E. Hasworth. M. & M., vol. 30, p. 52. 4½ columns. I.
- GEOLOGY AND OIL RESOURCES OF THE COALINGA DISTRICT, CALIFORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 398. 354 pages. I. 1910.

- GEOLOGY OF THE COALINGA OILFIELD.** M. & M., vol. 31, p. 4. 5 columns. I.
- GEOLOGY OF THE COALINGA OIL DISTRICT.** By W. Forstner. Min. & Sci. Press, vol. 99, p. 566. 2 columns. Map.
- THE WORKING OF OIL-SHALE AT PUMPHREYTON, SCOTLAND.** By W. Caldwell. T. I. M. E., vol. 36, p. 581. 9½ pages. I.
- See also OCCURRENCE OF PETROLEUM.
- SUMMARY OF GEOLOGY OF QUICKSILVER DEPOSITS OF PACIFIC SLOPE.** By G. F. Becker. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 961-985. 1886-87. I.
- See also OCCURRENCE OF QUICKSILVER.
- A GEOLOGICAL ANALYSIS OF THE SILVER PRODUCTION OF THE UNITED STATES IN 1906.** By W. Lindgren. U. S. G. S., Bull. 340, p. 23. 11 pages. 1907.
- GEOLOGY OF THE PEAKS SILVER FIELD, NEW SOUTH WALES.** By C. O. G. Lecombe. T. A. I. M. E., vol. 11, p. 122. 6 pages. I.
- SUMMARY OF GEOLOGY OF COMSTOCK LODGE AND WASHOE DISTRICT.** By G. F. Becker. U. S. G. S., 2d Ann. Rept., pp. 291-330. 1880-81. I.
- GEOLOGY OF THE WHITE PINE MINING DISTRICT, NEVADA** M & M., vol. 29, p. 521. 5 columns.
- GEOLOGY OF THE COBALT DISTRICT.** E. & M. J., vol. 87, p. 1267. 2 columns.
- THE GEOLOGY OF COBALT.** E. & M. J., vol. 86, p. 711. 3½ columns.
- GEOLOGY OF THE FREIBERG DISTRICT, GERMANY.** E. & M. J., vol. 87, p. 987. 1 column.
- GEOLOGY OF THE GUANAJUATO DISTRICT, MEXICO** By C. W. Botsford. E. & M. J., vol. 87, p. 691. 9½ columns. I.
- GEOLOGY OF THE ZACATECAS DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 402. 4 columns. I.
- GEOLOGY OF THE PACHUCA AND REAL DEL MONTE SILVER DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 520. 4½ columns.
- GEOLOGY OF THE MINING DISTRICTS OF CHIHUAHUA, MEXICO.** By R. M. Bogg. Min. & Sci. Press, vol. 97, p. 152, 4 columns, I.; p. 187, 5½ columns, I.
- GEOLOGY OF HOSTOTIPAQUILLO ORE DEPOSITS.** By S. J. Lewis. Min. & Sci. Press, vol. 101, p. 335. 5½ columns. I.
- GEOLOGY OF THE EL TIGRE MINING DISTRICT, MEXICO.** M. & M., vol. 29, p. 485. ½ column.
- GEOLOGY OF THE EL DOCTOR ORE DEPOSITS** Min. & Sci. Press, vol. 95, p. 242. 1 column.
- See also OCCURRENCE OF SILVER.
- GEOLOGY OF THE SOUTH AFRICAN TIN FIELDS** E. & M. J., vol. 89, p. 411. 3 columns. I.
- GEOLOGY OF THE CAPE PRINCE OF WALES TIN DEPOSITS** Min. & Sci. Press, vol. 95, p. 744. 6 columns. I.
- TIN MINING IN ULN SELANGER, FEDERATED MALAY STATES.** By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages. I.
- See also OCCURRENCE OF TIN.

Fossil Animals and Plants

- BIRDS WITH TEETH.** By O. C. Marsh. U. S. G. S., 3d Ann. Rept., pp. 45-88. 1881-82.
- A REVIEW OF THE NONMARINE FOSSIL MOLLUSCA OF NORTH AMERICA.** By C. A. White. U. S. G. S., 3d Ann. Rept., pp. 403-550. 1881-82. I.
- REVIEW OF THE FOSSIL OSTREIDAE OF NORTH AMERICA AND A COMPARISON OF THE LIVING FORMS.** By C. A. White. U. S. G. S., 4th Ann. Rept., pp. 273-430. 1882-83. I.
- THE GIGANTIC MAMMALS OF THE ORDER DINOCERATA.** By O. C. Marsh. U. S. G. S., 5th Ann. Rept., pp. 243-302. 1883-84.

- FOSSIL BUTTERFLIES OF FLORISSANT.** By S. H. Scudder. U. S. G. S., 8th Ann. Rept., pt. 1, pp. 433-474. 1886-87. I.
- FAUNA OF THE LOWER CAMBRIAN OR OLENELLUS ZONE.** By C. D. Walcott. U. S. G. S., 10th Ann. Rept., pt. 1, pp. 509-763. 1888-89. I.
- AMERICAN TERTIARY APHIDÆ.** By S. H. Scudder. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 341-366. 1891-92. I.
- DIANOSAURS OF NORTH AMERICA.** By O. C. Marsh. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 131-414. 1894-95. I.
- GENERAL GEOLOGY AND PALEONTOLOGY.** U. S. G. S., 20th Ann. Rept., pt. 2. 953 pages. 1898-99. I.
- DEVONIAN FOSSILS FROM SOUTHWESTERN COLORADO: the Fauna of the Ouray Limestone.** By G. H. Girty. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 25-81. 1898-99. I.
- THE STRATIGRAPHIC PALEONTOLOGY OF THE POTTSVILLE FORMATION IN THE SOUTHERN ANTHRACITE COAL FIELD, PENNSYLVANIA.** By D. White. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 749-930. 1898-99. I.
- PALEONTOLOGY OF THE EUREKA DISTRICT.** By C. D. Walcott. U. S. G. S., Monograph VIII. 298 pages. I. 1884.
- A BRIEF CONTRIBUTION TO THE GEOLOGY AND PALEONTOLOGY OF NORTH-WESTERN LOUISIANA.** By T. W. Vaughan. U. S. G. S., Bull. 142. 65 pages. I. 1896.
- STRATIGRAPHY AND PALEONTOLOGY OF UPPER CARBONIFEROUS ROCKS OF KANSAS SECTION.** By G. I. Adams, G. H. Girty, and D. White. U. S. G. S., Bull. 211. 123 pages. I. 1903.
- SKETCH OF PALÆOBOTANY.** By L. F. Ward. U. S. G. S., 5th Ann. Rept., pp. 357-452. 1883-84. I.
- SYNOPSIS OF FLORA OF LARAMIE GROUP.** By L. F. Ward. U. S. G. S., 6th Ann. Rept., pp. 399-557. 1884-85. I.
- GEOGRAPHICAL DISTRIBUTION OF FOSSIL PLANTS.** By L. F. Ward. U. S. G. S., 8th Ann. Rept., pt. 2, pp. 663-960. 1886-87. I.
- STATUS OF THE MESOZOIC FLORAS OF THE UNITED STATES.** By L. F. Ward. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 211-748. 1898-99. I.
- CONTRIBUTIONS TO THE KNOWLEDGE OF THE OLDER MESOZOIC FLORA OF VIRGINIA.** By W. M. Fontaine. U. S. G. S., Monograph VI. 144 pages. I. 1883.
- FOSSIL FLORA OF THE LOWER COAL MEASURES OF MISSOURI.** By D. White. U. S. G. S., Monograph XXXVII. 467 pages. I. 1899.

Geologic Progress and Studies

- GEOLOGY APPLIED TO MINING.** By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 479, 6 columns; p. 516, 5½ columns.
- THE POSSIBILITIES AND LIMITATIONS OF GEOLOGICAL SURVEY WORK AS APPLIED TO THE MINING INDUSTRY.** By G. O. Smith. Min. & Sci. Press, vol. 95, p. 652. 6 columns.
- GEOLOGY AND MINING.** By H. Bergmann. Min. Mag., vol. 10, p. 299, 8 pages; p. 365, 4 pages.
- ON THE STUDY OF GEOLOGY AND MINERALOGY AS SOURCES OF INTERESTING AND VALUABLE INFORMATION.** By G. Henwood. Min. Mag., vol. 8, p. 144. 12 pages.
- RADIOACTIVITY OF THE THERMAL WATERS OF YELLOWSTONE NATIONAL PARK.** By H. Schlundt and R. B. Moore. U. S. G. S., Bull. 395. 35 pages. I. 1909.
- CHART OF IGNEOUS ROCKS.** By S. Crossdale. Min. & Sci. Press, vol. 99, p. 598. 2½ columns.
- DEFINITIONS OF IGNEOUS ROCKS.** Min. & Sci. Press, vol. 97, p. 56. 1½ columns.

- ERUPTIVE ROCKS OF ELECTRIC PEAK AND SEPULCHRE MOUNTAIN, YELLOWSTONE NATIONAL PARK.** By J. P. Iddings. U. S. G. S., 12th Ann. Rept., pt. 1, pp. 569-664. 1890-91. I.
- PRE-CAMBRIAN IGNEOUS ROCKS OF THE UNKAR TERRANE, GRAND CANYON OF THE COLORADO, ARIZONA.** By C. D. Walcott. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 497-524. 1892-93. I.
- THE RELATIONS OF THE TRAPS OF THE NEWARK SYSTEM IN THE NEW JERSEY REGION.** By N. H. Darton. U. S. G. S., Bull. 67. 82 pages. I. 1890.
- SOME LAVA FLOWS OF THE WESTERN SLOPE OF THE SIERRA NEVADA, CALIFORNIA.** By F. L. Ransome. U. S. G. S., Bull. 89. 74 pages. I. 1898.
- LACCOLITHS OF THE BLACK HILLS.** By T. A. Jaggar, Jr. U. S. G. S., 21st Ann. Rept., pt. 3, pp. 163-303. 1899-1900. I.
- A LATE VOLCANIC ERUPTION IN NORTHERN CALIFORNIA AND ITS PECULIAR LAVA.** By J. S. Diller. U. S. G. S., Bull. 79. 33 pages. I. 1891.
- THE LAWS OF INTRUSION.** By B. Stevens. T. A. I. M. E., vol. 41, p. 650. 20½ pages. I.
- EXPERIMENTS ILLUSTRATING INTRUSION AND EROSION.** By E. Howe. U. S. G. S., 21st Ann. Rept., pt. 3, pp. 163-303. 1899-1900. I.
- ASSOCIATION OF IGNEOUS INTRUSIONS WITH IDAHO ORE BODIES.** By R. N. Bell. E. & M. J., vol. 85, p. 127. 1½ columns.
- NOTE ON THE EFFECT OF AN IGNEOUS DYKE ON A NATAL COAL-SEAM.** By G. H. Stanley. T. A. I. M. E., vol. 36, p. 220. 2½ pages.
- THE DISTRIBUTION OF THE ELEMENTS IN IGNEOUS ROCKS.** By H. S. Washington. T. A. I. M. E., vol. 39, p. 735. 30 pages.
- THE IGNEOUS CHARACTER OF THE CARBONIFEROUS ROCKS OF THE TOKATEA GOLDFIELD, CAPE COVILL PENINSULA.** By A. M'Kay. T. A. I. M. E., vol. 9, p. 195. 10 pages.
- ON A GROUP OF VOLCANIC ROCKS FROM THE TEWAN MOUNTAINS, NEW MEXICO.** By J. P. Iddings. U. S. G. S., Bull. 66. 34 pages. 1890.
- VOLCANIC ROCKS OF SOUTH MOUNTAIN, PENNSYLVANIA.** By F. Bascom. U. S. G. S., Bull. 136. 124 pages. I. 1896.
- LODES IN THE TERTIARY ERUPTIVES OF COLORADO.** By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 180. 4½ columns. I.
- THE IGNEOUS ROCKS OF TASMANIA.** By W. H. Twelvetrees and W. F. Petterd. T. A. I. M. E., vol. 5, p. 98. 16 pages. I.
- ON THE DEVELOPMENT OF CRYSTALLIZATION IN THE IGNEOUS ROCKS OF WASHOE, NEVADA, WITH NOTES ON THE GEOLOGY OF THE DISTRICT.** By A. Hague and J. P. Iddings. U. S. G. S., Bull. 17. 44 pages. 1885.
- THE GABBROS AND ASSOCIATED HORN-
BLÉNDE ROCKS OCCURRING IN THE
NEIGHBORHOOD OF BALTIMORE,
MARYLAND.** By G. H. Williams. U. S. G. S., Bull. 28. 78 pages. I. 1886.
- THE GABBROS AND ASSOCIATED ROCKS IN DELAWARE.** By F. D. Chester. U. S. G. S., Bull. 59. 45 pages. I. 1890.
- THE GNEISSES, GABBRO-SCHISTS, AND ASSOCIATED ROCKS OF SOUTHWESTERN MINNESOTA.** By C. W. Hall. U. S. G. S., Bull. 157. 160 pages. I. 1899.
- THE ERUPTIVE AND SEDIMENTARY ROCKS ON PIGEON POINT, MINNESOTA, AND THEIR CONTACT PHENOMENA.** By W. S. Bayley. U. S. G. S., Bull. 109. 121 pages. I. 1893.
- ROCKS OF SIERRA NEVADA.** By H. W. Turner. U. S. G. S., 14th Ann.

- Rept., pt. 2, pp. 435-495. 1892-93. I.
- GENERAL RELATIONS OF GRANITIC ROCKS IN THE MIDDLE ATLANTIC Piedmont Plateau. By G. H. Williams. U. S. G. S., 15th Ann. Rept., pp. 651-684. 1893-94. I.
- FLOW AND FRACTURE OF ROCKS AS RELATED TO STRUCTURE. By L. M. Hoskins. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 571-874. 1894-95. I.
- ON HYPERSTHENE ANDESITE AND ON TRICLINIC PYROXENE IN AUGITIC ROCKS. By W. Cross. U. S. G. S., Bull. 1. 42 pages. I. 1883.
- THE GREENSTONE-SCHIST AREAS OF THE MENOMINEE AND MARQUETTE REGIONS OF MICHIGAN. By G. H. Williams. U. S. G. S., Bull. 62. 241 pages. I. 1890.
- THE OCCURRENCE OF PRIMARY QUARTZ IN CERTAIN BASALTS. By J. P. Iddings. U. S. G. S., Bull. 66. 34 pages. 1890.
- THE CAMBRIAN ROCKS OF PENNSYLVANIA. By C. D. Walcott. U. S. G. S., Bull. 134. 43 pages. I. 1896.
- THE GREEN SCHISTS AND ASSOCIATED GRANITES AND PORPHYRIES OF RHODE ISLAND. By B. K. Emerson and J. H. Perry. U. S. G. S., Bull. 311. 74 pages. I. 1907.
- GEOLOGY AND PEGMATITES AND ASSOCIATED ROCKS OF MAINE, INCLUDING FELDSPAR, QUARTZ, MICA, AND GEM DEPOSITS. By E. S. Bastin. U. S. G. S., Bull. 445. 152 pages. I. 1911.
- GEOLOGY OF FELDSPAR, QUARTZ, AND MICA. By E. S. Bastin. U. S. G. S., Bull. 445. 152 pages. I. 1911.
- QUALITY OF BLUESTONE IN THE VICINITY OF THE ASHOKAN DAM. By C. P. Berkey. Sch. Mines Quart., vol. 29, p. 149. 11 pages. I.
- CONCERNING CERTAIN PERFORATED ROCKS IN THE COOLGARDIE DISTRICT. By F. D. Johnson. T. Au. I. M. E., vol. 4, p. 42. 2½ pages.
- NOTES ON THE ARCHEAN ROCKS OF MEXICO. E. & M. J., vol. 90, p. 821. 4 columns.
- SECOND EXPEDITION TO MOUNT ST. ELIAS. By I. C. Russell. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 1-91. 1891-92. I.
- LACCOLITHIC MOUNTAIN GROUPS OF COLORADO, UTAH, AND ARIZONA. By W. Cross. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 157-241. 1892-93. I.
- PRELIMINARY REPORT ON THE GEOLOGY OF THE ARBUCKLE AND WICHITA MOUNTAINS, IN INDIAN TERRITORY AND OKLAHOMA. By J. A. Taff. U. S. G. S., Professional Paper 31. 97 pages. I. 1904.
- A GEOLOGICAL RECONNAISSANCE ACROSS THE BITTERROOT RANGE AND CLEARWATER MOUNTAINS IN MONTANA AND IDAHO. By W. Lindgren. U. S. G. S., Professional Paper 27. 123 pages. I. 1904.
- GEOLOGY OF THE BIGHORN MOUNTAINS. By N. H. Darton. U. S. G. S., Professional Paper 51. 129 pages. I. 1906.
- GEOLOGY OF THE GREEN MOUNTAINS IN MASSACHUSETTS. By R. Pumphrey and others. U. S. G. S., Monograph XXIII. 206 pages. I. 1894.
- A GEOLOGICAL RECONNAISSANCE ACROSS THE CASCADE RANGE NEAR THE FORTY-NINTH PARALLEL. By G. O. Smith and F. C. Calkins. U. S. G. S., Bull. 235. 103 pages. I. 1904.
- PETROGRAPHY AND GEOLOGY OF THE IGNEOUS ROCKS OF THE HIGHWOOD MOUNTAINS, MONTANA. By L. V. Pirsson. U. S. G. S., Bull. 237. 208 pages. I. 1905.
- GEOLOGY OF THE BURRO MOUNTAIN, TURQUOISE DISTRICT, NEW MEXICO. E. & M. J., vol. 86, p. 843. 3 columns.
- GEOLOGY OF THE SIERRA NEVADA, OR CALIFORNIA RANGE. By J. B.

- Trask. Min Mag, vol 1, p. 6.
15 pages.
- THE GEOLOGY OF ASCUTNEY MOUNTAIN, VERMONT. By R. A. Daly. U. S. G. S., Bull. 209 122 pages. I. 1903.
- MECHANICS OF APPALACHIAN STRUCTURE. By B. Willis U S G S., 13th Ann. Rept, pt. 2, pp. 211-281. 1891-92. I.
- TOPOGRAPHIC DEVELOPMENT OF THE KLAMATH MOUNTAINS By J. S. Diller. U S. G. S., Bull. 196. 69 pages I. 1902.
- A PRELIMINARY PAPER ON THE GEOLOGY OF THE CASCADE MOUNTAINS IN NORTHERN WASHINGTON. By I. C. Russell. U. S. G. S., 20th Ann. Rept., pt. 2, pp. 83-210. 1898-99 I.
- STRUCTURE OF MONUMENT MOUNTAIN, GREAT BARRINGTON, MASSACHUSETTS. By T. N. Dale U. S. G. S., 14th Ann. Rept, pt. 2, pp. 551-565. I
- STRUCTURAL DETAILS IN THE GREEN MOUNTAIN REGION AND IN EASTERN NEW YORK By T. N. Dale. U. S. G. S., Bull 195. 22 pages. I. 1902.
- STRUCTURAL DETAILS IN THE GREEN MOUNTAIN REGION AND IN EASTERN NEW YORK. By T. N. Dale. U. S. G. S., 16th Ann. Rept., pt. 1, pp. 543-570. 1894-95.
- ON THE STRUCTURE OF THE RIDGE BETWEEN THE TACONIC AND GREEN MOUNTAIN RANGES, VERMONT. By T. N. Dale. U. S. G. S., 14th Ann. Rept., pt. 2, pp. 525-549. 1892-93. I.
- ALTITUDES BETWEEN LAKE SUPERIOR AND THE ROCKY MOUNTAINS. By W. Upham. U S. G. S., Bull. 72. 229 pages. 1891.
- AVERAGE ELEVATION OF THE UNITED STATES. By H. Gannett. U. S. G. S., 13th Ann. Rept., pt. 2, pp. 283-289. 1891-92. I.
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES. By H. Gannett. U. S. G. S., Bull. 5 325 pages. 1884
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES By H. Gannett. U. S G S., Bull. 76 393 pages. 1891.
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES. By H Gannett. U. S G S., Bull. 160. 775 pages. 1899
- A DICTIONARY OF ALTITUDES IN THE UNITED STATES By H Gannett. U. S G. S., Bull. 274. 1072 pages. 1906.
- LATITUDES AND LONGITUDES OF CERTAIN POINTS IN MISSOURI, KANSAS, AND NEW MEXICO. By R. S. Woodward. U. S. G. S., Bull. 49. 133 pages. 1889.
- ELEVATIONS IN THE DOMINION OF CANADA. By J. W. Spencer. U. S. G. S., Bull. 6. 43 pages. 1884.
- ALTITUDES IN ALASKA. By H Gannett. U S G S., Bull. 169 13 pages 1900
- ROCK CLEAVAGE By C. K. Leith. U S G S., Bull. 239. 216 pages. I. 1905
- THE THEORY OF THE FORMATION OF CLEAVAGE LINES E & M. J., vol. 85, p. 212 1 column.
- SYMMETRIC STRUCTURE IN LIMESTONE AND LAVAS. By R. H. Chapman. Min. & Sci. Press, vol. 98, p. 623. 3 columns. I.
- EXPERIMENTS ON SCHISTOSITY AND SLATY CLEAVAGE. By G F Becker. U. S. G. S., Bull. 241. 34 pages. I. 1904.
- NOMENCLATURE OF SHOOTS. By W. C. W. Pearce. T. Au I. M E., vol. 13, p. 129 3½ pages.
- SURFACE ALTERATIONS OF GOLD ORES. By A. D. Brokaw. M. & M., vol. 31, p. 687. 3 columns.
- SURFACE INDICATIONS OF ORE-SHOOTS IN DEPTH. By W. H. Storms. Min. & Sci. Press, vol. 101, p. 537. 4 columns.

- SURFACE INDICATIONS OF ORE-SHOOTS IN DEPTH.** By C Janin. Min & Sci. Press, vol 101, p. 679, 2 columns, I; p. 713, 1½ columns.
- OUTCROP OF OREBODIES.** By W. H. Emmons. Min & Sci. Press, vol 99, p. 751, 8 columns, I.; p. 782, 11½ columns, I
- SUGGESTIONS FOR FIELD OBSERVATIONS OF ORE DEPOSITS.** By S F. Emmons. Min. & Sci. Press, vol 95, p. 18. 5½ columns.
- ORE DEPOSITS IN SERPENTINE.** By W Forestner. Min. & Sci Press, vol. 95, p. 121. 3½ columns.
- SOME REMARKS ON THE METALLIFEROUS VEINS OF THE SOUTH** By O. M. Lieber. Min. Mag, vol 5, p. 306. 5 pages. I.
- ORE SHOOTS AT BUTTE, MONTANA** By R. H. Sales. E. & M J, vol 86, p. 226. 3½ columns.
- THE BLOW-OUT** By F. L. Garrison. Min. & Sci. Press, vol 95, p 406, 3 columns, I.; p. 458, ¼ column.
- AN INTERESTING STOCKWORK** By I. F. Lancks. Min & Sci. Press, vol. 101, p. 540 1½ columns. I.
- STOCKWORKS** By J H Collins. Min. & Sci Press, vol. 101, p 774. 1 column.
- DIP AND PITCH.** By R. W Raymond. T. A. I. M. E., vol. 39, p. 326. 2 pages.
- DIP AND PITCH: Discussion of the paper of Dr. R. W Raymond, p. 326.** T. A. I. M. E., vol 39, p. 898. 18 pages. D.
- ROCK OXIDATION AT CRIPPLE CREEK.** By P. Argall. Min. & Sci. Press, vol. 96, p. 883. 9 columns I
- METAMORPHIC RANGES IN SONORA, MEXICO** By F. J. H. Merrill. Min. & Sci. Press, vol 97, p. 296. 1 column.
- A TREATISE ON METAMORPHISM.** By C. R. Van Hise. U. S. G. S., Monograph XLVII. 1286 pages. I. 1904.
- DYNAMIC METAMORPHISM IN ERUPTIVE ROCKS.** By G. H. Williams. U. S. G. S., Bull 62. 241 pages. I. 1890.
- EXPLORATION OF CONTACT METAMORPHIC ORE DEPOSITS** By C A. Stewart E. & M. J, vol. 90, p. 513. 6½ columns.
- EROSION ON THE NORTHUMBERLAND STRATA.** By W. C. Milner. J. M. Soc. N S., vol 15, p 111 4½ pages
- RATE OF RECESSION OF THE NIAGARA FALLS.** By G. K. Gilbert. U. S. G.S., Bull. 306. 31 pages I. 1907.
- LAND SCULPTURE BY WIND-BLOWN SAND.** E. & M. J., vol. 85, p. 687. 2½ columns. I.
- DENUDATION AND EROSION IN THE SOUTHERN APPALACHIAN REGION AND THE MONONGAHELA BASIN.** By L C. Glenn. U. S. G S., Professional Paper 72. 137 pages. I. 1911.
- NOTES ON THE STRATIGRAPHY OF CALIFORNIA** By G. F. Becker U. S. G. S., Bull. 19. 28 pages 1885.
- TERTIARY REVOLUTION IN TOPOGRAPHY OF PACIFIC COAST.** By J. S. Diller U. S. G S., 14th Ann Rept., pt. 2, pp 397-434. 1892-93. I.
- TACONIC PHYSIOGRAPHY.** By T. N. Dale. U. S. G. S., Bull 272. 52 pages. I. 1905.
- GEOLOGICAL HISTORY OF HARBORS** By N. S. Shaler U. S. G. S., 13th Ann Rept., pt. 2, pp. 93-209. 1891-92 I.
- ON THE FORM AND POSITION OF THE SEA LEVEL.** By R. S. Woodward. U. S. G. S, Bull. 48. 88 pages. 1888
- THE DRUMLINS OF SOUTHEASTERN WISCONSIN** By W. C. Alden. U. S. G. S., Bull. 273. 46 pages. I. 1905.
- SUBAERIAL DECAY OF ROCKS AND ORIGIN OF THE RED COLOR OF CERTAIN FORMATIONS.** By I. C. Russell. U. S G. S., Bull. 52. 65 pages. I. 1889.

- ORIGIN AND NATURE OF SOILS. By N. S. Shaler U. S. G. S., 12th Ann. Rept., pt 1, pp 213-345. 1890-91. I.
- UNCONFORMITY AND DEPOSITS. By Otto Ruhl. Min. & Sci Press, vol 96, p. 778. 3 columns I.
- THE CAUSES OF CLIMATIC, GEOLOGICAL, AND GEOGRAPHICAL CHANGES UPON THE EARTH. By J. M. Potter. T. Au. I M. E., vol. 3, p. 21. 35 pages
- PLAN AND SCOPE OF THE PROPOSED INVESTIGATIONS OF STRUCTURAL MATERIALS UNDER THE AUSPICES OF THE UNITED STATES GEOLOGICAL SURVEY By J. A. Holmes and R. L. Humphrey. Soc. P. E. E., vol. 13, p. 304. 10 pages.
- THE VISCOSITY OF SOLIDS. By C. Barus. U. S. G S, Bull. 73. 139 pages. I 1891.
- ON THE THERMO-ELECTRIC MEASUREMENT OF HIGH TEMPERATURES. By C. Barus U. S. G S, Bull. 54. 313 pages I. 1889.
- THE VOLUME THERMODYNAMICS OF LIQUIDS. By C. Barus. U. S. G. S, Bull. 96 100 pages. I. 1892.
- THE COMPRESSIBILITY OF LIQUIDS. By C. Barus. U. S. G. S., Bull. 92. 96 pages. I. 1892.
- THE MECHANISM OF SOLID VISCOSITY. By C. Barus U. S. G. S., Bull. 94. 138 pages 1892.
- HIGH TEMPERATURE WORK IN IGNEOUS FUSION AND EBULLITION, CHIEFLY IN RELATION TO PRESSURE. By C. Barus. U. S. G. S., Bull. 103. 57 pages. I. 1893.
- METEOR CRATER. By J. B. Hastings. Min. & Sci Press, vol. 98, p. 523. 4½ columns. I.
- See also DECOMPOSITION OF COAL.
- See also INDEXES, TEXTBOOKS, ETC.
- THE TRAP DIKES OF THE LAKE CHAMPLAIN REGION By J. F. Kemp and O. F. Marsten U. S. G S, Bull. 107. 62 pages I. 1893.
- DIKES AND FISSURES AT PIOCHE, NEVADA. E. & M J., vol 88, p. 546. 1½ columns.
- SILVER ISLET VEIN. Min & Sci. Press, vol. 98, p 729 1 column
- LODES AND VEINS IN THE MANHATTAN DISTRICT, NEVADA. E. & M. J, vol. 88, p. 82. 2 columns.
- LODES IN THE TERTIARY ERUPTIVES OF COLORADO By T. A. Rickard. Min & Sci Press, vol 95, p. 180. 4½ columns. I.
- VEINS AND VEIN MINING. Min. Mag., vol. 10, p. 345. 18 pages. I.
- NOTES ON GRANITE VEINS IN CLAY, SLATES (ELVANS), MINERAL DEPOSITS, VEINS, LODS Min. Mag., vol. 10, p. 306. 6 pages. I.
- A FRAGMENTARY CONTRIBUTION TO THE VEIN GEOLOGY OF THE SOUTHERN STATES Min. Mag, vol. 10, p. 108. 5 pages I.
- THE VEIN SYSTEM OF THE STANDARD MINE, BODIE, CALIFORNIA. By R. G. Brown. T A. I. M. E., vol. 38, p. 343. 15 pages. I.
- THE VEIN SYSTEM OF THE STANDARD MINE, BODIE, CALIFORNIA: Discussion of the paper of R. Gilman Brown, Trans., vol. 38, p. 343 T A. I. M. E., vol. 39, p 795. 1½ pages.
- FISSURE-VEINS IN GRANITE, SCHISTS, ETC, MEXICAN SILVER MINES T. A. I. M. E., vol. 39, p. 361. 6½ pages.
- GOLD-SILVER VEINS OF OPHIR, CALIFORNIA. By W. Lindgren. U. S. G. S, 14th Ann. Rept., pt. 2, pp. 243-284. 1892-93. I.
- VEINS OF TANGIER, NOVA SCOTIA. Min. & Sci. Press, vol. 95, p. 430. 4 columns. I.
- VEINS OF TREASURE MOUNTAIN, COLORADO. Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.

Types of Veins and Examples

- THE LAWS OF FISSURES. By B. Stevens. T. A. I M. E., vol. 40, p. 475. 17 pages. I.

- MINERAL-VEIN FORMATION AT BOULDER HOT SPRINGS, MONTANA** By W. H. Weed. U. S. G. S., 21st Ann. Rept., pt 2, pp. 227-255. 1899-1900. I.
- GEOLOGY AND VEIN-PHENOMENA.** T. A. I. M. E., vol. 41, p. 613. 8 pages. D.
- ARTIFICIAL VEIN FORMATION.** By R. C. Canby. E. & M. J., vol. 85, p. 719. 2 columns.
- FEATURES OF A VEIN FORMATION IN NICARAGUA: Gold and Silver Veins.** By H. E. West. E. & M. J., vol. 87, p. 1130. 9½ columns. I.
- VEIN STRUCTURE IN THE MONUMENT MINE, IDAHO.** Min. & Sci. Press, vol. 98, p. 557. 3½ columns. I.
- VEIN STRUCTURE IN THE WONDER DISTRICT, NEVADA.** E. & M. J., vol. 87, p. 291. 3 columns.
- REMARKS ON THE CHANGES WHICH TAKE PLACE IN THE STRUCTURE AND COMPOSITION OF MINERAL VEINS NEAR THE SURFACE, WITH PARTICULAR REFERENCE TO THE EAST TENNESSEE COPPER MINES** By J. D. Whitney. Min. Mag., vol. 5, p. 24. 4½ pages.
- Caverns and Natural Bridges**
- THE MAMMOTH CAVE OF KENTUCKY.** By J. H. Gardner. M. & M., vol. 31, p. 720. 6 columns. I.
- DEUTSCHMAN'S CAVE, NEAR GLACIER, BRITISH COLUMBIA, CANADA.** By W. S. Ayres. T. A. I. M. E., vol. 38, p. 857. 20½ pages. I.
- THE GROTTO OF ADELSBERG.** Min. Mag., vol. 9, p. 542. 6½ pages.
- Faults: Rules Regarding Them, Etc.**
- THE FAULT PROBLEM.** By T. C. Chamberlin. Min. & Sci. Press, vol. 96, p. 172. 1½ columns.
- FAULTS AS RECEPTACLES FOR MINERAL DEPOSITS** T. A. I. M. E., vol. 4, p. 32. 2½ pages. I.
- RELATION OF FAULTS TO ORE DEPOSITS** E. & M. J., vol. 86, p. 1159. 1½ columns.
- THE EXTRAORDINARY FAULTING AT THE BERLIN MINE, NEVADA.** By E. Daggett. T. A. I. M. E., vol. 38, p. 297. 16 pages. I.
- FAULTING IN THE BULLFROG DISTRICT, NEVADA.** By W. H. Emmons and G. H. Gairney. Min. & Sci. Press, vol. 100, p. 931, 5½ columns, I.; vol. 101, p. 46, 5½ columns, I.
- FAULT LODGES IN THE RANDSBURG QUADRANGLE, CALIFORNIA.** Min. & Sci. Press, vol. 101, p. 533. 1½ columns.
- FAULTING IN THE RED CLOUD MINE.** By H. W. Turner. Min. & Sci. Press, vol. 95, p. 747. 3½ columns. I.
- FAULTING AND VEIN-FORMATION IN THE ZACATECAS DISTRICT** E. & M. J., vol. 87, p. 1227. 1 column. I.
- FAULTING AND VEIN STRUCTURE IN THE CRACKER CREEK GOLD DISTRICT, BAKER COUNTY, OREGON.** By J. T. Pardee. U. S. G. S., Bull. 380, p. 85. 8 pages. I. 1908.
- Air-Blasts, Volcanoes and Earth-quakes**
- EARTHQUAKE FORECASTS.** By G. K. Gilbert. Min. & Sci. Press, vol. 98, p. 168. 8 columns.
- EARTHQUAKES IN CALIFORNIA.** By J. E. Keeler. U. S. G. S., Bull. 68, 25 pages, 1890; Bull. 95, 31 pages, 1892; Bull. 112, 57 pages, 1893; Bull. 114, 23 pages, 1894; Bull. 129, 25 pages, 1895; Bull. 147, 23 pages, 1896; Bull. 155, 47 pages, 1898; Bull. 161, 31 pages, 1899.
- THE SAN FRANCISCO EARTHQUAKE AND FIRE OF APRIL 18, 1906, AND THEIR EFFECTS ON STRUCTURES AND STRUCTURAL MATERIALS.** By G. K. Gilbert and others. U. S. G. S., Bull. 324. 170 pages. I. 1907.
- RECENT EARTH MOVEMENT IN THE GREAT LAKES REGION.** By G. K. Gilbert. U. S. G. S., 18th Ann.

- Rept., pt 2, pp. 595-647 1896-97. I
- THE CHARLESTON EARTHQUAKE OF AUGUST 31, 1886. By C. E. Dutton. U. S. G. S., 9th Ann. Rept., pp. 203-528. 1887-88 I.
- THE JAMAICA EARTHQUAKE. Min. & Sci. Press, vol. 95, p. 690 $\frac{1}{2}$ column
- EARTH MOVEMENTS AT BUTTE, MONTANA. By R. H. Chapman. Min. & Sci. Press, vol. 96, p. 493 $1\frac{1}{2}$ columns.
- THE EARTHQUAKE FIRE. By T. A. Rickard. Min. & Sci. Press, vol. 100, p. 718. $13\frac{1}{2}$ columns. I.
- EXPLOSIVE ROCK Min. & Sci. Press, vol. 96, p. 387. $\frac{1}{2}$ column.
- EARTHQUAKES AND THEIR RELATION TO MINE EXPLOSIONS E & M J., vol. 87, p. 411. 9 columns.
- NOTES ON THE EFFECT OF EARTHQUAKES ON DEEP UNDERGROUND WATER CIRCULATION. By W. H. Yeandle E. & M. J., vol. 88, p. 871. $1\frac{1}{2}$ columns
- RECENT VOLCANIC ERUPTIONS IN BERING SEA By A. S. Eakle. Min. & Sci. Press, vol. 96, p. 353. $1\frac{1}{2}$ columns I.
- HAWAIIAN VOLCANOES. By C. E. Dutton. U. S. G. S., 4th Ann. Rept., pp. 75-219. 1882-83. I.
- Theory of Ore Deposits, Origin of Coal, Petroleum, Etc.**
- THEORY OF MINERAL VEINS. By J. Le Conte. Min. & Sci. Press, vol. 22, p. 23. 4 columns. I.
- THEORY OF ORE DEPOSITS. Min. & Sci. Press, vol. 20, p. 172. $1\frac{1}{2}$ columns.
- SOME INDICATIONS OF ORE DEPOSITS. By E. Lidgey. T. Au. I. M. E., vol. 4, p. 110. 10 pages.
- RECEPTACLES FOR VALUABLE MINERAL DEPOSITS. By F. D. Power T. Au. I. M. E., vol. 4, p. 6. 28 pages. I.
- THE CLASSIFICATION OF VALUABLE MINERAL DEPOSITS. By F. D. Power. T. Au. I. M. E., vol. 1, p. 109. $20\frac{1}{2}$ pages.
- A STUDY OF SOME ORE DEPOSITS By F. D. Johnson T. Au. I. M. E., vol. 1, p. 28. 7 pages I
- GENERAL OBSERVATIONS ON THE FORMATIONS OF METALLIFEROUS VEINS. By B. Cotta Min. Mag., vol. 3, p. 386, 5 pages; p. 465, 6 pages.
- MAGMATIC WATERS. By H. W. Hixon. J. C. M. I., vol. 10, p. 301. 20 pages.
- CRITERIA OF DOWNWARD SULPHIDE ENRICHMENT By F. L. Ransome. J. C. M. I., vol. 13, p. 393. 14 pages.
- THE FORMATION AND ENRICHMENT OF ORE-BEARING VEINS By G. J. Bancroft. T. A. I. M. E., vol. 38, p. 245. 24 pages.
- VOLCANIC WATERS. By J. B. Hastings T. A. I. M. E., vol. 39, p. 129. 10 pages.
- THE FORMATION AND ENRICHMENT OF ORE-BEARING VEINS. By G. J. Bancroft. T. A. I. M. E., vol. 40, p. 809. 10 pages.
- METALLOGRAPHIC STUDY OF ORE DEPOSITS. P. C. M. & M. Soc. S. A., vol. 9, p. 279 2 columns.
- CAUSES OF ORE-SHOOTS Min. Mag., London, vol. 2, p. 459. 1 column.
- SEQUENCE OF ORE SHOOTS AND BONANZAS. By A. Aitken M. & M., vol. 30, p. 274. 2 columns.
- THE DETECTION OF MINUTE TRACES OF GOLD IN COUNTRY ROCK. By A. R. Andrew T. I. M. & M., vol. 19, p. 276. 22 pages.
- ON SECONDARY ENLARGEMENTS OF MINERAL FRAGMENTS IN CERTAIN ROCKS. By R. D. Irving and C. R. Van Hise. U. S. G. S., Bull. 8. 56 pages. I. 1884.
- POPULAR FALLACIES REGARDING PRECIOUS-METAL ORE DEPOSITS. By A. Williams, Jr. U. S. G. S., 4th Ann. Rept., pp. 253-271. 1882-83.

- ASSOCIATION OF MAGNETITE WITH SULPHIDES IN MINERAL DEPOSITS.** By J. B. Hastings. Min. & Sci. Press, vol. 97, p. 333, 4 columns; p. 358, 3½ columns.
- DIFFUSION AS A FACTOR IN ORE DEPOSITION.** By L T Wright. Min. & Sci. Press, vol. 96, p. 844. 4 columns I.
- A THEORY OF ORE DEPOSITION.** By H V Winchell. Min. & Sci. Press, vol. 96, p. 385. 4 columns.
- TENDENCIES IN THE STUDY OF ORE DEPOSITS.** By W. Lindgren. Min. & Sci. Press, vol. 96, p. 567. 8½ columns.
- A THEORY OF ORE DEPOSITION.** By J. E. Spurr. Min. & Sci. Press, vol. 96, p. 261. 9½ columns.
- DIFFUSION AS A FACTOR IN ORE DEPOSITION.** By C De Kalb. Min. & Sci. Press, vol. 96, p. 226. 2½ columns.
- METAL DISTRIBUTIONS IN THE VEINS OF SCANDINAVIA.** By H Sjogren. Min. & Sci. Press, vol. 98, p. 159. 4 columns. D.
- DEVELOPMENT OF THE MODERN THEORIES OF ORE DEPOSITION.** By S F. Emmons. Min. & Sci. Press, vol. 99, p. 400. 8 columns.
- ORES FORMED BY MAGMATIC SEGREGATION.** By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 451. 11½ columns.
- ECONOMICS OF SECONDARY ENRICHMENT.** By A M. Finlayson. Min. & Sci. Press, vol. 101, p. 71, 8½ columns; p. 111, 6 columns.
- GENESIS OF ORE.** By J. Le Conte. Min. & Sci. Press, vol. 100, p. 833. 3½ columns.
- THEORIES OF ORE GENESIS OF FIFTY YEARS AGO.** By S. F. Emmons. Min. & Sci. Press, vol. 100, p. 739. 8 columns.
- THEORY OF ORE DEPOSITION.** Min. & Sci. Press, vol. 100, p. 424, 8 columns; p. 450, 5½ columns.
- MINERAL IN UNDERGROUND WATERS.** Min. & Sci. Press, vol. 95, p. 590. 1½ columns.
- ORE DEPOSITION.** By G J Bancroft. Min. & Sci. Press, vol. 95, p. 581. 2 columns.
- THE RELATION OF ORE DEPOSITION TO PHYSICAL CONDITIONS.** By W. Lindgren. Min. & Sci. Press, vol. 95, p. 207. 8 columns.
- THE GENESIS OF ORES.** By H V. Winchell. Min. & Sci. Press, vol. 95, p. 55. 6½ columns.
- LOCUS OF VADOSE ORE DEPOSITION.** By C. R. Keyes. E. & M. J., vol. 87, p. 857. 3 columns.
- THE ULTIMATE SOURCE OF ORES.** By C. R. Keyes. T. A. I. M. E., vol. 41, p. 139. 24 pages.
- AN INSTANCE OF SECONDARY IMPOVERISHMENT.** By H. H. Knox. T. I. M. & M., vol. 18, p. 273. 18 pages. I.
- A THEORY OF VOLCANIC ACTION AND ORE DEPOSITS, THEIR NATURE AND CAUSE.** By H W Hixon. T. I. M. & M., vol. 18, p. 202, 18 pages, I.; p. 256, 16 pages.
- GOLD IN SEA WATER.** P C M. & M. Soc. S. A., vol. 6, p. 93. ½ column.
- GOLD AND SILVER IN THERMAL SPRINGS.** Min. & Sci. Press, vol. 96, p. 562. ½ column.
- THE PRESENCE OF GOLD AND SILVER IN DEEP-SEA DREDGINGS.** By L. Wagoner. T. A. I. M. E., vol. 38, p. 704. 1 page.
- CLASSIFICATION OF MEXICAN ORE DEPOSITS.** E & M. J., vol. 88, p. 692. 1½ columns.
- "SOME NOTES ON THE ORIGIN OF ASBESTOS"** By A E Bartow. J. C. M. I., vol. 13, p. 438. 5½ pages.
- See also OCCURRENCE OF ASBESTOS.
- GENESIS OF THE VIRGINIA BARITE DEPOSITS.** By T. L. Watson. T. A. I. M. E., vol. 38, p. 731. 1 page.
- ORIGIN OF THE MISSOURI BARITE.** By A A. Steel. T. A. I. M. E., vol. 40, p. 721. 6 pages. I.

See also OCCURRENCE OF BARITE.

BORAX DEPOSITS OF THE UNITED STATES. By C. R. Keyes T. A. I. M. E., vol. 40, p. 674. 36½ pages. I.

See also OCCURRENCE OF BORAX.

THE ALTERATION OF VEGETABLE MATTER INTO COAL. By D. B. Dowling. J. C. M. I., vol. 13, p. 180. 9½ pages.

THE ORIGIN OF COAL E. & M. J., vol. 86, p. 238 1½ columns.

THE ORIGIN OF COAL. By H. M. Chance E. & M. J., vol. 86, p. 27. 5 columns.

METAMORPHISM OF COAL: Formation of Anthracite and Natural Coke. Min. & Sci. Press, vol. 95, p. 59. ½ column.

REMARKS ON THE ORIGIN OF COAL FIELDS, AND THE TIME REQUIRED FOR THEIR FORMATION. By C. Lyell. Min. Mag., vol. 1, p. 121. 5 pages.

ON THE MODE OF FORMATION OF CANNEL COAL. By J. S. Newberry. Min. Mag., vol. 9, p. 352. 3 pages.

FOSSIL TREE IN THE ARLEY MINE AT CHEQUERBENT COLLIERY. T. I. M. E., vol. 37, p. 174. 2 pages.

See also OCCURRENCE OF COAL.

CHINA CLAY: Its Nature and Origin. By G. Hickling. T. I. M. E., vol. 36, p. 10. 25 pages. I.

See also OCCURRENCE OF WORKABLE CLAYS.

SCIENTIFIC STUDY OF COPPER DEPOSITS. By A. J. Sale. M. & M., vol. 31, p. 684. 4½ columns. I.

SOME NEW POINTS IN THE GEOLOGY OF COPPER ORES. By J. F. Kemp. J. C. M. I., vol. 10, p. 251. 5 pages.

GENESIS OF THE KENNICOTT COPPER MINE, ALASKA. E. & M. J., vol. 89, p. 1226 1 column

THE MIAMI-INSPIRATION ORE-ZONE. By C. F. Tolman, Jr. Min. & Sci. Press, vol. 99, p. 646. 9½ columns. I

THE GENESIS OF THE MOUNT LYEAL ORES. By J. W. Gregory. T. A. I. M. E., vol. 10, p. 145. 12 pages. I.

GENESIS OF COPPER ORES OF SHASTA COUNTY, CALIFORNIA. E. & M. J., vol. 88, p. 396 ½ column.

GENESIS OF THE EVERGREEN COPPER DEPOSIT, COLORADO By E. A. Ritter T. A. I. M. E., vol. 38, p. 757. 9 pages. I

THEORY OF DEPOSITION OF THE WHITE KNOB COPPER DEPOSITS, MACKAY, IDAHO. T. A. I. M. E., vol. 38, p. 293. 3 pages.

ORE-SHOOTS AT BUTTE, MONTANA. By R. H. Sales. Min. & Sci. Press, vol. 97, p. 190. 3 columns.

THE GENESIS OF THE COPPER DEPOSITS OF YERINGTON, NEVADA. By E. P. Jennings J. C. M. I., vol. 10, p. 257. 3½ pages.

GENESIS OF THE ORE DEPOSITS OF THE FORTUNA MINE, BINGHAM, UTAH. E. & M. J., vol. 86, p. 1195. ½ column.

ORIGIN OF THE MARBLE BAY COPPER DEPOSIT. J. C. M. I., vol. 10, p. 248 ½ page.

See also OCCURRENCE OF COPPER AND COPPER ORES.

THE ERUPTIVE DIAMOND-BEARING BRECCIAS OF THE BOSHOFF DISTRICT, SOUTH AFRICA By J. P. Johnson. T. I. M. & M., vol. 17, p. 277. 8 pages.

GENESIS OF THE ARKANSAS DIAMONDS. E. & M. J., vol. 87, p. 154. ½ column.

KIMBERLITE ROCK AND THE ORIGIN OF THE DIAMONDS. By F. W. Voit. E. & M. J., vol. 87, p. 789. 6½ columns.

ORIGIN OF DIAMONDS IN GERMAN SOUTH WEST AFRICA By R. G. Pearson. E. & M. J., vol. 89, p. 1282. 1 column.

GENESIS OF AMATRICE: The New Gem Stone of Utah. E. & M. J., vol. 87, p. 1039 ½ column.

AN ATTEMPT TO GROW A DIAMOND. P. C. M. & M. Soc. S. A., vol. 7, p. 123 Note.

- See also OCCURRENCE OF DIAMONDS.
 GENESIS OF THE GOLDFIELD ORES.
 M. & M., vol. 30, p. 511 4 columns. I.
- GOLDFIELD ORE DEPOSITS. By F. L. Ransome M & M., vol. 30, p. 396, 6 columns, I; p. 510, 6 columns, I.
- THE DEPOSITION OF GOLD Ore Deposits. By J. C F Johnson T. Au. I M. E., vol 1, p. 142. 2 pages.
- CONCENTRATION OF SOLUBLE GOLD IN A DUMP By G B. Butterworth. Min Mag., London, vol. 2, p. 458. 2 columns.
- DEPTH TO WHICH SECONDARY ENRICHMENT MAY EXTEND IN THE WESTERN AUSTRALIAN ORE DEPOSITS. T. Au. I. M. E., vol. 13, p 179. 3 pages.
- BROKEN HILL VUGHS: Occurrence and Some Probable Causes By H. G. Baye T Au. I. M. E., vol. 3, p. 192. 5½ pages.
- INDICATORS AND QUARTZ REEFS IN VICTORIAN MINES By J T. Procter. T Au. I. M. E., vol 3, p. 198 4 pages I.
- THE "INDICATOR" FEATURE IN SOME GOLD OCCURRENCES, AUSTRALIA. By W. Bradford. T Au I M. E., vol. 3, p. 231 6 pages I.
- ORIGIN OF THE REEFS IN THE WAIHI GOLDFIELD, NEW SOUTH WALES. T Au. I. M. E., vol 8, pt 2, p. 170. 2 pages. I.
- THE GENESIS OF BENDIGO AND CARRICK LODS, OTAGO, NEW ZEALAND By J. Park. Min & Sci Press, vol. 97, p. 121. 3½ columns I.
- THE ORIGIN OF THE GOLD IN THE RAND BANKET. By J. W. Gregory. T. I M. & M., vol. 17, p. 2. 83½ pages. I.
- THEORIES OF THE GENESIS OF THE RAND GOLD. T. I. M. & M., vol. 17, p. 3. 4 pages.
- ORIGIN OF THE GOLD OF THE RAND. By J. W. Gregory. Min. & Sci. Press, vol. 98, p. 662. 6½ columns.
- THE ORIGIN OF THE GOLD IN BANKET. By J. S. Curtis. P. C. M. & M. Soc. S. A., vol. 8, p 198, 9 columns; p. 242, ½ column; p 302, 4 columns; p 342, 1 column
- ORIGIN OF GOLD IN THE RANDSBURG QUADRANGLE, CALIFORNIA Min. & Sci. Press, vol. 101, p. 536. ½ column
- ORIGIN OF GOLD "POCKETS" IN NORTHERN CALIFORNIA. By O H. Hershey. Min. & Sci. Press, vol. 101, p 741. 3½ columns.
- THEORY OF THE EXPOSED TREASURE LODE DEPOSIT, MOJAVE, CALIFORNIA. By C De Kalb. T. A. I M. E., vol 38, p. 319. ½ page
- DERIVATION OF ORES OF THE GEORGETOWN DISTRICT, COLORADO. M. & M., vol. 30, p. 208. 2 columns.
- ORE DEPOSITS OF THE EASTERN GOLDBELT OF NORTH CAROLINA By W. O. Crosby. T A I. M. E., vol 38, p 849 9 pages.
- ORIGIN OF ORE IN THE COAHUILA DISTRICT, MEXICO. E. & M. J., vol. 89, p. 1072 1½ columns.
- MODE OF ORE GENESIS: Gold and Silver in Nicaragua. E. & M. J., vol. 87, p. 1131. 1½ columns. I
- ORIGIN OF THE PLACER GOLD OF GUIANA. By L. Fraser. Min & Sci. Press, vol. 101, p. 703. 4 columns
- DEEP LEADS OF VICTORIA. Theory of Their Origin. T. I M. & M., vol. 17, p. 214. 10 pages. I.
- DEPOSITION OF ORE IN THE MANHATTAN DISTRICT, Nevada. E. & M. J., vol. 88, p. 83. 2 columns.
- THE TREADWELL ORE DEPOSITS, DOUGLAS ISLAND, ALASKA By A. C Spencer. U. S G. S., Bull. 259, p. 69. 19 pages. I.
- FLOOD-GOLD. E. & M. J., vol. 86, p. 558. ½ column.
- See also OCCURRENCE OF GOLD.
- ORIGIN OF CUBAN IRON ORES M & M., vol. 31, p. 246. ½ column.
- THE RESIDUAL BROWN IRON ORES OF CUBA. By C. M. Weld T. A. I. M. E., vol. 40, p. 299. 13½ pages I.

- PYRITIC ORIGIN OF IRON ORE DEPOSITS.** E. & M. J., vol. 86, p. 630. 3 columns.
- THE PYRITIC ORIGIN OF IRON ORE DEPOSITS.** By H. M. Chance. E. & M. J., vol. 86, p. 408. 8 columns.
- GENESIS OF BROWN HEMATITE ORES AND A NEW SOURCE OF SULPHUR SUPPLY.** By H. M. Chance. T. A. I. M. E., vol. 39, p. 522. 18 pages. I.
- A NEW THEORY OF THE GENESIS OF BROWN HEMATITE ORES AND A NEW SOURCE OF SULPHUR SUPPLY:** Discussion of the paper of H. M. Chance, p. 522. T. A. I. M. E., vol. 39, p. 916. 4½ pages.
- THE ORIGIN OF DEPOSITS OF PYRITES.** By A. B. Willmott. J. C. M. I., vol. 10, p. 118. 11 pages.
- GENESIS OF THE ONTARIO IRON ORES.** J. C. M. I., vol. 11, p. 115. 1 page.
- ORIGIN OF PROTO-CARBONATE OF IRON IN COAL MEASURES.** Min. Mag., vol. 6, p. 201. 5 pages.
- POSSIBLE ORIGIN OF THE CLINTON IRON ORE OF ALABAMA.** T. A. I. M. E., vol. 40, p. 119. 8 pages.
- THE ORIGIN OF THE CLINTON IRON ORE, HUNTINGDON COUNTY, PENNSYLVANIA.** T. A. I. M. E., vol. 40, p. 147. 18½ pages. I.
- ORIGIN OF THE CLINTON OOLITIC IRON ORES OF NEW YORK STATE.** T. A. I. M. E., vol. 40, p. 176. 3 pages.
- THE GEOLOGICAL RELATIONS OF THE SCANDINAVIAN IRON ORES.** By H. Sjögren. T. A. I. M. E., vol. 38, p. 766. 69 pages. I.
- See also OCCURRENCE OF IRON ORES.
- THE ORIGIN OF LATERITE.** By J. M. Campbell. T. I. M. & M., vol. 19, p. 432. 26 pages. I.
- THE GENESIS OF THE LEADVILLE ORE DEPOSITS.** By M. Boehmer. T. A. I. M. E., vol. 41, p. 162. 4½ pages. I.
- GENESIS OF THE ORES OF LEADVILLE.** By S. F. Emmons. Min. & Sci. Press, vol. 95, p. 401. 9 columns.
- GENESIS OF THE LEADVILLE ORES.** E. & M. J., vol. 89, p. 265. 2 columns. I.
- THEORY OF ORE DEPOSITION IN SOUTHWESTERN MISSOURI.** Min. & Sci. Press, vol. 96, p. 291, 7 columns; p. 325, 7½ columns.
- A REPLACEMENT OF RHYOLITE PORPHYRY BY STEPHANITE AND CHALCOPYRITE AT LEADVILLE.** By C. W. Fenner. Sch. Mines Quart., vol. 31, p. 235. 6 pages. I.
- PRESENT VIEWS OF GENESIS OF LEADVILLE LIMESTONE ORES.** By S. F. Emmons. E. & M. J., vol. 85, p. 104. 5 columns.
- OZARK LEAD AND ZINC-DEPOSITS: Their Genesis, Localization, and Migration.** By C. R. Keyes. T. A. I. M. E., vol. 40, p. 184. 47½ pages. I.
- See also OCCURRENCE OF LEAD.
- ORIGIN OF A MANGANESE DEPOSIT IN SOUTHERN INDIA.** T. I. M. & M., vol. 18, p. 140. 3 pages. I.
- See also OCCURRENCE OF MANGANESE.
- ORIGIN OF THE MONAZITE DEPOSITS OF THE CAROLINAS.** T. A. I. M. E., vol. 40, p. 225. 1 page.
- See also OCCURRENCE OF MONAZITE.
- GENESIS OF THE VIRGINIA NICKEL ORES.** T. A. I. M. E., vol. 38, p. 697. ½ page.
- See also OCCURRENCE OF NICKEL.
- GENESIS OF PETROLEUM.** M. & M., vol. 30, p. 222. 1½ columns.
- RELATIONS BETWEEN LOCAL MAGNETIC DISTURBANCES AND THE GENESIS OF PETROLEUM.** By G. F. Becker. U. S. G. S., Bull. 401. 24 pages. 1909.
- THE CONDITIONS OF ACCUMULATION OF PETROLEUM IN THE EARTH.** By D. T. Day. T. A. I. M. E., vol. 41, p. 219. 5 pages.
- See also OCCURRENCE OF PETROLEUM.
- ORIGIN OF THE ROCK PHOSPHATE OF THE CLARENDON DEPOSIT, NEW ZEALAND.** T. A. I. M. E., vol. 11, p. 190. 6 pages. I.

- NATURE AND ORIGIN OF DEPOSITS OF PHOSPHATE OF LIME** By R. A. F. Penrose, Jr. U. S. G. S., Bull. 46. 143 pages. I. 1888.
- See also OCCURRENCE OF PHOSPHATES.
- ORIGIN AND FORMATION OF PLATINUM DEPOSITS IN BRITISH COLUMBIA.** J. C. M. I., vol. 13, p. 317. 2½ pages.
- See also OCCURRENCE OF PLATINUM
- THEORY OF THE QUICKSILVER DEPOSITS OF MEXICO, DULCES NOMBRES.** E. & M. J., vol. 88, p. 685. 1½ columns.
- See also OCCURRENCE OF QUICKSILVER.
- ORIGIN OF COBALT-SILVER ORES OF ONTARIO.** By O. E. Hore. Min. & Sci. Press, vol. 97, p. 874. 5½ columns. I.
- THE ORIGIN OF THE SILVER OF JAMES TOWNSHIP, MONTREAL RIVER MINING DISTRICT.** By A. E. Barlow. J. C. M. I., vol. 11, p. 256. 18 pages. I.
- ORIGIN OF THE COBALT-SILVER ORES OF NORTHERN ONTARIO.** By R. E. Hore. J. C. M. I., vol. 11, p. 275. 12 pages.
- ORIGIN OF THE PEAKS SILVER FIELD ORES, NEW SOUTH WALES** T. A. I. M. E., vol. 11, p. 137. 12 pages. I
- GENESIS OF THE GUANAJUATO ORE DEPOSITS.** E. & M. J., vol. 87, p. 693. 1 column
- ORIGIN OF THE ORES OF THE NACOAIZI DISTRICT, MEXICO.** E. & M. J., vol. 86, p. 659. 1 column.
- THE ORE DEPOSITS OF MAGDALENA, NEW MEXICO.** By P. Argall. E. & M. J., vol. 86, p. 366. 15 columns. I.
- GENESIS OF THE LAKE VALLEY, NEW MEXICO, SILVER-DEPOSITS.** Discussion of Paper of C. R. Keyes, vol. 39, pp. 139, 850. T. A. I. M. E., vol. 40, p. 831. 4 pages.
- THE SILVER-LEAD ORE ZONES OF THE UMBRUMBERKA LODGE.** By N. Dudley. T. A. I. M. E., vol. 1, p. 135. 4½ pages.
- See also OCCURRENCE OF SILVER.
- THEORY OF THE PROMONTORIO ORE DEPOSIT.** T. A. I. M. E., vol. 38, p. 741. 5½ pages. I.
- ORIGIN OF THE TIN DEPOSITS IN SOUTH AFRICA.** E. & M. J., vol. 89, p. 573. 5 columns. I.
- GEOLOGY AND MINING OF THE TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA** By A. H. Fay. T. A. I. M. E., vol. 38, p. 664. 18 pages. I.
- ORIGIN OF TIN DEPOSITS OF CAPE COLONY.** P. C. M. & M. Soc. S. A., vol. 8, p. 170. 2½ columns
- See also OCCURRENCE OF TIN.
- THEORY OF THE FORMATION OF THE JOPLIN REGION ORE DEPOSITS.** T. A. I. M. E., vol. 38, p. 320. 23 pages.
- PROBABLE RELATION BETWEEN "THE ZINCIFEROUS SULPHIDE ORES AND THE OXIDIZED ORES OF THE BROKEN-HILL LODGE"** By C. W. Marsh. T. A. I. M. E., vol. 1, p. 56. 9½ pages. I.
- THE ORE DEPOSITS OF MAGDALENA, NEW MEXICO.** By P. Argall. E. & M. J., vol. 86, p. 366. 15 columns. I.
- See also OCCURRENCE OF ZINC.
- ORIGIN OF PEGMATITE** By J. B. Hastings. T. A. I. M. E., vol. 39, p. 104. 24½ pages.
- METALLIC SULPHIDES IN THE TUFFS OF SANTO DOMINGO.** By F. L. Garrison. Min. & Sci. Press, vol. 95, p. 305. 10½ columns. I.
- LODES IN THE TERTIARY ERUPTIVES OF COLORADO.** By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 180. 4½ columns. I.
- ORIGIN OF THE PEGMATITE DEPOSITS OF WESTERN MAINE.** E. & M. J., vol. 87, p. 1127. ¾ column.
- See also SOURCE AND SUPPLY OF WATER.
- Occurrence of Alum and Nitrates**
- THE GILA RIVER ALUM DEPOSITS.** By C. W. Hays. U. S. G. S., Bull. 315, p. 215. 10 pages. I. 1906.

NITRATE DEPOSITS OF SOUTHERN CALIFORNIA. By F. W. Graeff. E. & M. J., vol. 90, p. 173. 2½ columns.

NITRATE OF SODA INDUSTRY OF CHILE. By S. H. Loram. Min. & Sci. Press, vol. 100, p. 125, 8 columns, I.; p. 180, 10 columns, I.

THE NITER INDUSTRY OF CHILE. E. & M. J., vol. 90, p. 19. 14½ columns. I.

NOTES ON THE ALUMINUM INDUSTRY IN FRANCE. By T. Callot. E. & M. J., vol. 89, p. 1229. 3 columns. I.

NITRATE OF SODA: Its Abundance in South Peru. Min. Mag., vol. 3, p. 499. 7 pages.

Occurrence of Antimony

THE WHEATON RIVER ANTIMONY DEPOSITS, YUKON TERRITORY. By D. D. Cairnes. J. C. M. I., vol. 13, p. 297. 11½ pages. I.

THE ARKANSAS ANTIMONY DEPOSITS. By F. L. Hess. U. S. G. S., Bull. 340, p. 241. 12 pages. I. 1907.

THE AURIFEROUS ANTIMONY ORE OF WEST GORE, NOVA SCOTIA. By D. F. Haley. E. & M. J., vol. 88, p. 723. 5½ columns.

ANTIMONY IN SOUTHERN UTAH. By G. B. Richardson. U. S. G. S., Bull. 340, p. 253. 4 pages. 1907.

Occurrence of Arsenic

AN ARSENIC MINE IN PUTNAM COUNTY, NEW YORK. By E. K. Judd. E. & M. J., vol. 85, p. 306. 1 column.

ARSENIC MANUFACTURE AT MIDVALE, UTAH. By L. A. Palmer. M. & M., vol. 30, p. 641. 7 columns. I.

Occurrence of Asbestos

ASBESTOS: Occurrence and Uses By H. R. Edgecomb. M. & M., vol. 31, p. 469. 6½ columns. I.

NOTES ON THE RECENT DEVELOPMENTS IN ASBESTOS MINING IN

QUEBEC. By W. J. Woolsey. J. C. M. I., vol. 13, p. 408. 6 pages. I.

ON THE DISTRIBUTION OF ASBESTOS DEPOSITS IN THE EASTERN TOWNSHIPS OF QUEBEC. By J. A. Dresser. J. C. M. I., vol. 13, p. 414. 26 pages. I.

ASBESTOS IN QUEBEC. By F. Cirkel. E. & M. J., vol. 86, p. 461. 1 column.

THE QUARRIES OF THE CANADIAN ASBESTOS DISTRICT By F. Cirkel. E. & M. J., vol. 89, p. 918. 6½ columns. I.

THE ASBESTOS INDUSTRY IN CENTRAL WYOMING. By F. H. Baitow. E. & M. J., vol. 90, p. 559. 3 columns. I.

ASBESTOS IN WYOMING. By H. C. Beeler. E. & M. J., vol. 90, p. 955. 2½ columns. I.

See also **THEORY OF ORE DEPOSITS.**

Occurrence of Asphalts

BITUMEN AND OILS IN WEST AFRICA. By T. H. Bootman. E. & M. J., vol. 87, p. 1037. 3 columns.

THE TAR-SANDS OF THE ATHABASCA RIVER, CANADA. By Robt. Bell. T. A. I. M. E., vol. 38, p. 836. 12 pages. I.

AN OCCURRENCE OF ASPHALTITE IN NORTHEASTERN NEVADA By R. Anderson. U. S. G. S., Bull. 380, p. 283. 2½ pages. 1908.

THE CARBONACEOUS AND BITUMINOUS MINERALS OF NEW BRUNSWICK. By R. W. Ellis. J. C. M. I., vol. 11, p. 204. 15 pages.

GRAHAMITE DEPOSITS OF SOUTHEASTERN OKLAHOMA. By J. A. Taff. U. S. G. S., Bull. 380, p. 286. 12 pages. I. 1908.

OZOKERITE IN UTAH By H. W. MacFarten. Min. & Sci. Press, vol. 99, p. 789. 2½ columns. I.

OZOKERITE DEPOSITS IN UTAH. By J. A. Taff and C. D. Smith. U. S. G. S., Bull. 285, p. 369. 4 pages. 1905.

MANJAK AS WORKED AT THE VISTABELLA MINE, TRINIDAD By J. C. T. Raspas. T. I. M. E., vol. 36, p. 119. 5 pages.

Occurrence of Barite

A COMMERCIAL OCCURRENCE OF BARITE NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Phalen. U. S. G. S., Bull. 340, p. 458. 4½ pages. I. 1907.

THE GEOLOGY, MINING, AND PREPARATION OF BARITE IN WASHINGTON COUNTY, MISSOURI. By A. A. Steel. T. A. I. M. E., vol. 40, p. 711, 32½ pages. I.

THE VIRGINIA BARITE DEPOSITS. By T. L. Watson. T. A. I. M. E., vol. 38, p. 710. 24 pages. I.

BARITE ASSOCIATED WITH IRON-ORE IN PINAR DEL RIO PROVINCE, CUBA. By C. Catlett. T. A. I. M. E., vol. 38, p. 358. 1½ pages.

See also THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES

The Occurrence of Bismuth

BISMUTH: Its Occurrence and Use. By E. B. Wilson. M. & M., vol. 30, p. 105. 5½ columns.

Occurrence of Borax

AMERICAN BORAX DEPOSITS. By C. R. Keys. E. & M. J., vol. 88, p. 826. 5 columns. I.

See also UNITED STATES

BORAX IN CALIFORNIA. Min. and Sci. Press, vol. 101, p. 400. 1½ columns.

BORATE DEPOSITS OF CALIFORNIA. By A. B. Wainwright. T. I. M. E., vol. 37, p. 156. 6 pages.

Distribution of Building Stone

GEOLOGY OF ROAD-BUILDING STONES OF MASSACHUSETTS, WITH SOME CONSIDERATION OF SIMILAR MATERIALS FROM OTHER PARTS OF THE UNITED STATES. By N. S. Shaler.

U. S. G. S., 16th Ann. Rept., pt. 2, pp. 277-341. 1894-95. I.

THE BUILDING STONES AND MATERIALS OF SOUTHEASTERN ALASKA. By C. W. Wright. U. S. G. S., Bull. 345, p. 116. 10 pages. 1907.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF MINNEAPOLIS, MINNESOTA. By E. F. Burchard. U. S. G. S., Bull. 430, p. 280. 12 pages. 1909.

STRUCTURAL MATERIALS IN PARTS OF OREGON AND WASHINGTON. By N. H. Darton. U. S. G. S., Bull. 387. 36 pages. I. 1909.

STRUCTURAL MATERIALS AVAILABLE IN THE VICINITY OF AUSTIN, TEXAS. By E. F. Burchard. U. S. G. S., Bull. 430, p. 292. 24 pages. 1909.

FIELD INVESTIGATIONS OF STRUCTURAL MATERIALS BY THE U. S. GEOLOGICAL SURVEY. By E. F. Burchard. T. A. I. M. E., vol. 41, p. 490. 4½ pages.

GRANITES. By G. Suit. Min. & Sci. Press, vol. 99, p. 712. 5 columns. I.

CHIEF COMMERCIAL GRANITES OF MASSACHUSETTS, NEW HAMPSHIRE AND RHODE ISLAND. By T. N. Dale. U. S. G. S., Bull. 354. 228 pages. I. 1908.

GRANITES OF THE SOUTHEASTERN ATLANTIC STATES. By T. L. Watson. U. S. G. S., Bull. 426. 282 pages. I.

THE GRANITES OF VERMONT. By T. N. Dale. U. S. G. S., Bull. 404. 138 pages. I. 1909.

THE OOLITIC LIMESTONE INDUSTRY AT BEDFORD AND BLOOMINGTON, ILLINOIS. By J. A. Udden. U. S. G. S., Bull. 430, p. 335. 12 pages. 1909.

OOLITIC LIMESTONE AT BOWLING GREEN AND OTHER PLACES IN KENTUCKY. By J. H. Gardner. U. S. G. S., Bull. 430, p. 373. 7 pages. 1909.

THE WHITE LIMESTONE AREA OF FRANKLIN, SUSSEX COUNTY, NEW JERSEY. By J. E. Wolf and A. H.

- Brooks. U. S. G. S., 18th Ann. Rept., pt. 2, pp. 425-458 1896-97. I.
- LIMESTONES OF SOUTHWESTERN PENNSYLVANIA. By F. G. Clapp. U. S. G. S., Bull. 249. 52 pages. I. 1905.
- MARBLE PROSPECTS IN THE CHIRICAHUA MOUNTAINS, ARIZONA. By S. Paige. U. S. G. S., Bull. 380, p. 299. 13 pages. I. 1908.
- MARBLE OF WHITE PINE COUNTY, NEVADA, NEAR GANDY, UTAH. By N. H. Darton. U. S. G. S., Bull. 340, p. 377. 3 pages. 907.
- THE SLATES OF ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 430, p. 317. 18 pages. I. 1909.
- SLATE MINING IN WALES AND CAUSE OF ITS DECLINE. E & M. J., vol. 85, p. 145. 7½ columns. I.
- NOTE ON A VARIETY OF MAINE SLATE. By T. N. Dale. U. S. G. S., Bull. 285, p. 449. 1½ pages. 1905.
- SUPPLEMENTARY NOTES ON THE GRANITES OF NEW HAMPSHIRE. By T. N. Dale. U. S. G. S., Bull. 430, p. 346. 26 pages. 1909.
- THE SLATE BELT OF EASTERN NEW YORK AND WESTERN VERMONT. By T. N. Dale. U. S. G. S., 19th Ann. Rept., pt. 3, pp. 153-307. 1897-98. I.
- THE PRODUCTION OF SLATE IN THE UNITED STATES. Min. & Sci. Press, vol. 95, p. 467. ½ column.
- THE SLATE QUARRIES OF VERMONT. By C. S. Richardson. Min Mag., vol. 2, p. 271. 12 pages.
- Occurrence of Cement Rock**
- PORTLAND CEMENT MATERIALS NEAR DUBUQUE, IOWA. By E. F. Burdard. U. S. G. S., Bull. 315, p. 225. 7½ pages. 1906.
- PORTLAND CEMENT IN MICHIGAN. By L. L. Kimball. U. S. G. S., Mineral Resources, 1903.
- CEMENT MATERIAL NEAR HAVRE, MONTANA. By L. J. Pepperberg. U. S. G. S., Bull. 380, p. 327. 10 pages. 1908.
- CEMENT MATERIALS IN REPUBLICAN VALLEY, NEBRASKA. By N. H. Darton. U. S. G. S., Bull. 430, p. 381. 8 pages. I. 1909.
- CEMENT RESOURCES OF THE CUMBERLAND GAP DISTRICT, TENNESSEE-VIRGINIA. By E. C. Eckel. U. S. G. S., Bull. 285, p. 374. 2½ pages. 1905.
- PORTLAND CEMENT MATERIALS NEAR EL PASO, TEXAS. By G. B. Richardson. U. S. G. S., Bull. 340, p. 411. 4 pages. 1907.
- CEMENT RESOURCES OF WASHINGTON. By H. Landes. U. S. G. S., Bull. 285, p. 377. 8 pages. 1905.
- PORTLAND CEMENT MATERIALS IN EASTERN WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 232. 12 pages. I. 1906.
- Occurrence of Workable Clays**
- KAOLINS AND FIRE CLAYS OF EUROPE. By H. Ries. U. S. G. S., 19th Ann. Rept., pt. 6. 91 pages. 1897-98.
- THE CLAYS AND OTHERS OF ALABAMA. By E. A. Smith. E & M. J., vol. 85. p. 1088. ½ column.
- See also OCCURRENCE OF IRON ORES.
- CLAYS OF THE BIRMINGHAM DISTRICT, ALABAMA. By C. Butts. U. S. G. S., Bull. 315, p. 291. 4 pages. 1906.
- THE CLAYS OF ARKANSAS. By J. C. Branner. U. S. G. S., Bull. 351. 247 pages. I. 1908.
- CLAYS OF GARLAND COUNTY, ARKANSAS. By E. C. Eckel. U. S. G. S., Bull. 285, p. 407. 3½ pages. 1905.
- CLAY DEPOSITS OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By M. K. Shaler and J. H. Gardner. U. S. G. S., Bull. 315, p. 296. 6½ pages. 1906.

- CHINA-CLAY MINING IN CORNWALL. Min. Mag., vol. 4, p. 450. 3 columns. I.
- NOTES ON THE CLAYS OF FLORIDA. By G. C. Watson. U. S. G. S., Bull. 380, p. 346. 10 pages. 1908.
- KAOLINS AND FIRE CLAYS OF CENTRAL GEORGIA. By O. Veatch. U. S. G. S., Bull. 315, p. 303. 12 pages. I. 1906.
- CLAY RESOURCES OF NORTHEASTERN KENTUCKY. By W. C. Phalen. U. S. G. S., Bull. 285, p. 411. 6 pages. 1905.
- CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.
- CLAYS OF THE PENOBSCOT BAY REGION, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 428. 4 pages. 1905.
- CLAYS OF CAPE COD, MASSACHUSETTS. By M. L. Fuller. U. S. G. S., Bull. 285, p. 432. 9½ pages. 1905.
- BRICK CLAYS NEAR CLINTON, MASSACHUSETTS. By W. C. Alden. U. S. G. S., Bull. 430, p. 402. 3 pages. 1909.
- CLAY RESOURCES OF THE ST. LOUIS DISTRICT, MISSOURI. By N. M. Fenneman. U. S. G. S., Bull. 315, p. 315. 6½ pages. I. 1906.
- CLAYS IN THE KOOTENAI FORMATION NEAR BELT, MONTANA. By C. A. Fisher. U. S. G. S., Bull. 340, p. 417. 7 pages. 1907.
- THE SHALE AND CLAY DEPOSITS OF NOVA SCOTIA AND PORTIONS OF NEW BRUNSWICK. By H. Ries. J. C. M. I., vol. 13, p. 336. 20½ pages. I.
- THE CLAY AND SHALE DEPOSITS OF NOVA SCOTIA. By H. Ries. J. M. Soc. N. S., vol. 15, p. 9. 18½ pages.
- NOTES ON CLAYS AND SHALES IN CENTRAL PENNSYLVANIA. By G. H. Ashley. U. S. G. S., Bull. 285, p. 442. 2 pages. 1905.
- WHITE CLAYS OF SOUTH MOUNTAIN, PENNSYLVANIA. By G. W. Stose. U. S. G. S., Bull. 315, p. 322. 12½ pages. I. 1906.
- CLAYS AND SHALES OF SOUTHWESTERN CAMBRIA COUNTY, PENNSYLVANIA. By W. C. Phalen and L. Martin. U. S. G. S., Bull. 315, p. 344. 10 pages. 1906.
- CLAYS AND SHALES OF CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA. By E. F. Lines. U. S. G. S., Bull. 315, p. 335. 8 pages. 1906.
- CLAYS OF WESTERN KENTUCKY AND TENNESSEE. By A. F. Crider. U. S. G. S., Bull. 285, p. 417. 11 pages. I. 1905.
- BENTONITE OF THE LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 285, p. 445. 4 pages. 1905.
- THE CLAYS OF TENNESSEE. By G. H. Ashley. Min. & Sci. Press, vol. 101, p. 712. 1½ columns.
- See also THEORY OF ORE DEPOSITS.
- Occurrence of Coal and Lignite**
- OUR STEAM-COAL AND ITS USES. By L. Knowles. T. I. M. E., vol. 36, p. 273. 13 pages.
- CUMBERLAND COAL. Min. Mag., vol. 1, p. 35. 9 pages.
- SEMI-BITUMINOUS COAL-FIELDS OF GREAT BRITAIN AND AMERICA COMPARED. By Prof. Whitaker. Min. Mag., vol. 10, p. 189. 2 pages.
- AMERICAN VS. EUROPEAN COAL MINES. By H. M. Payne. M. & M., vol. 31, p. 195. 2½ columns.
- BRIEF NOTES ON EUROPEAN COAL MINES. By F. W. Parsons. E. & M. J., vol. 88, p. 497, 7½ columns, I.; p. 589, 12 columns, I.; p. 809, 11 columns, I.
- SOUTH AFRICAN COALS AND THEIR ECONOMICS. By A. J. Andrews. P. C. M. & M. Soc. S. A., vol. 9, p. 330, 9½ columns; p. 391, 6 columns, D.

- SOUTH AFRICAN COALS AND THEIR ECONOMICS.** By A. J. Andrews. P. C. M. & M. Soc. S. A., vol. 10, p. 92. 5 columns.
- FUELS OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910
- THE WARRIOR COAL BASIN IN THE BIRMINGHAM QUADRANGLE, ALABAMA.** By C. Butts. U. S. G. S., Bull. 285, p. 211 12 pages. I. 1905.
- LAHAUSAGE MINE, ALABAMA** By A. W. Evans. M. & M., vol. 30, p. 77. 4½ columns. I.
- THE COOSA COALFIELD OF ALABAMA.** By W. F. Prouty. E. & M. J., vol. 88, p. 921. 4 columns. I. Sections and Maps.
- THE NORTHERN PART OF THE COHABA COAL FIELD, ALABAMA** By C. Butts. U. S. G. S., Bull. 316, p. 76. 40 pages. I. 1906.
- THE ALASKA COAL FIELDS** By G. C. Martin. U. S. G. S., Bull. 314, p. 40. 7 pages. I. 1906.
- ALASKA COAL AND ITS UTILIZATION.** By A. H. Brooks. U. S. G. S., Bull. 442, p. 47. 54 pages. I. 1909
- COAL RESOURCES OF SOUTHWESTERN ALASKA.** By R. W. Stone. U. S. G. S., Bull. 259, p. 151. 21 pages. I.
- BERING RIVER COAL FIELD.** By G. C. Martin. U. S. G. S., Bull. 259, p. 140. 10½ pages. I.
- THE BERING RIVER COALFIELD OF ALASKA.** By L. W. Storm. E. & M. J., vol. 90, p. 272. 9½ columns. I.
- THE BERING RIVER COAL DEPOSITS, ALASKA.** By G. C. Martin. U. S. G. S., Bull. 250. 64 pages. I. 1905.
- CONTROLLER BAY COAL FIELD, ALASKA.** By G. W. Evans. M. & M., vol. 30, p. 449, 8 columns, I.; p. 552, 6½ columns, I.
- COAL FIELDS OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 259, p. 172. 3½ pages.
- COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906
- GEOLOGY AND COAL RESOURCES OF THE CAPE LISBURNE REGION, ALASKA.** By A. J. Collier. U. S. G. S., Bull. 278. 54 pages. I. 1906.
- COAL DEPOSITS OF THE SKREENA RIVER.** J. C. M. I., vol. 10, p. 223. 6 pages. Map.
- THE COAL FIELDS OF THE KACHEMAK BAY REGION** By R. W. Stone. U. S. G. S., Bull. 277. 88 pages. I. 1906
- A RECONNAISSANCE OF THE MATANUSKA COAL FIELD, ALASKA, IN 1905.** By G. C. Martin. U. S. G. S., Bull. 289. 36 pages. I. 1906.
- THE ARKANSAS COAL FIELD.** By A. J. Collier. U. S. G. S., Bull. 316, p. 137. 25 pages. I. 1906.
- THE ARKANSAS COAL FIELD.** By A. J. Collier. U. S. G. S., Bull. 326. 158 pages. I. 1907.
- REMARKS ON THE BROWN COAL BEDS AND ASSOCIATED DEPOSITS OF THE WERRIBEE PLAINS, VICTORIA.** By A. E. Kitson. T. A. I. M. E., vol. 8, pt. 2, p. 255. 12 pages.
- NOTES ON VICTORIAN BROWN COAL BEDS.** By J. Stirling. T. A. I. M. E., vol. 1, p. 35. 21½ pages. I.
- NEW COALFIELD IN BRITISH COLUMBIA.** E. & M. J., vol. 85, p. 544. ½ column.
- THE HOSMER MINES, LIMITED, BRITISH COLUMBIA: Coal.** By H. H. Yuill. J. C. M. I., vol. 13, p. 230. 27 pages. I. Maps.
- THE NICOLA VALLEY COAL-FIELD, BRITISH COLUMBIA.** By M. Roberts. T. A. I. M. E., vol. 40, p. 798. 6 pages. I.
- THE CLASSIFICATION OF NICOLA VALLEY COALS, BRITISH COLUMBIA.** By

- S. J. Castleman J. C. M. I., vol. 13, p. 600. 3 pages.
- COAL MINING IN CALIFORNIA. Min. & Sci. Press, vol. 95, p. 186. $\frac{1}{2}$ column.
- COAL IN THE MOUNT DIABLO RANGE, MONTEREY COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 285, p. 223. 2 pages. I. 1905.
- COAL OF STONE CANYON, MONTEREY COUNTY, CALIFORNIA. By M. R. Campbell. U. S. G. S., Bull. 316, p. 435. 4 pages. 1906
- THE COALFIELDS OF CANADA. By P. Thompson. E. & M. J., vol. 88, p. 1271. 2 columns.
- COAL AREAS IN THE CANADIAN NORTHWEST E. & M. J., vol. 90, p. 548. 4 columns.
- MINING AT LITHBRIDGE, ALBERTA. By A. T. Shumick. M & M, vol 31, p. 635. 2 columns. I.
- THE COALFIELDS OF ALBERTA AND SASKATCHEWAN. By P. Thompson. E. & M J, vol. 88, p. 17. $3\frac{1}{2}$ columns.
- THE COALS AND COAL FIELDS OF ALBERTA, SASKATCHEWAN AND MANITOBA By D. B Dowling. J. C. M I, vol 10, p 227. 13 pages. I. Map.
- THE GALT COAL FIELD, ALBERTA, CANADA. By W. D L. Hardie. J. C. M. I, vol. 13, p. 190. $5\frac{1}{2}$ pages. D.
- THE DAN RIVER COALFIELD IN NORTH CAROLINA. E. & M. J., vol. 89, p. 1239. 2 columns.
- THE COAL LANDS OF THE DEEP RIVER COMPANY IN NORTH CAROLINA. By W. R. Johnson. Min. Mag, vol 1, p. 352. 13 pages.
- GEOLOGICAL FEATURES OF THE COAL FIELDS OF CHILE. T. I. M. E., vol. 38, p. 34. 4 pages.
- THE COAL FIELDS AND COLLIERIES OF THE REPUBLIC OF CHILE. By A. Russell. T. I. M. E., vol. 38, p. 29. 54 pages. I.
- COAL IN CHINA. Min. & Sci. Press, vol. 20, p. 42. $\frac{1}{2}$ column.
- COAL MINING IN MANCHURIA. By T. T. Read. Min. Mag, London, vol. 1, p. 215. 8 columns. I.
- THE FUSHUN COLLIERY, SOUTH MANCHURIA. By W. A. Moller. T. A. I. M. E., vol. 41, p. 241. 4 pages.
- THE PINGHSIANG COLLIERY, CHINA. By K. P. Swensen. Min. & Sci. Press, vol 101, p. 564. 7 columns. I.
- COAL MINING IN CHINA. By T. T. Read. Min. & Sci. Press, vol. 98, p. 44. 5 columns. Map.
- MINING IN NORTHERN CHINA. By F. L. Cole. Min. & Sci. Press, vol. 98, p. 584. $4\frac{1}{2}$ columns. Map.
- THE COAL FIELDS BETWEEN SHAN HAI KUAN AND MUKDEN, NORTH CHINA. By W. A. Moller. T. I. M. E, vol 38, p. 460. 15 pages. I.
- COAL MINING IN NORTH CHINA E. & M. J, vol 85, p. 366 $2\frac{1}{2}$ columns.
- COAL DEPOSITS IN COLOMBIA. Min. & Sci. Press, vol 98, p. 220 $1\frac{1}{2}$ columns. I.
- PICTOU COAL FIELD LORE. M. & M., vol. 31, p. 179. $\frac{1}{2}$ column.
- THE YAMPA COAL FIELD, ROUTT COUNTY, COLORADO By N. M. Fenneman and H. S. Gale. U. S. G S., Bull. 285, p. 226 14 pages. I. 1905.
- THE SOUTH PARK COAL FIELD, COLORADO. By C. W. Washburne. U. S G S., Bull. 381, p. 307. 10 pages. I. 1908.
- THE GRAND MESA COAL FIELD, COLORADO. By W. T. Lee. U. S. G. S., Bull. 341, p. 316. 17 pages. I. 1907.
- COAL FIELDS OF THE DANFORTH HILLS AND GRANDHOGBACK IN NORTHWESTERN COLORADO. By H. S. Gale. U S. G S, Bull. 316, p. 264. 40 pages. I. 1906.
- THE TRINIDAD COAL-FIELD, COLORADO. By G. B. Richardson. U. S. G. S, Bull. 381, p. 379. 68 pages. I. 1908.

- ROUTT COUNTY, COLORADO, COALS. By R. L. Herrick. M. & M., vol. 29, p. 230. 9½ columns. I.
- THE CAÑON CITY COAL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 381, p. 341. 38 pages. I. 1908.
- THE COLORADO SPRINGS COAL FIELD, COLORADO. By M. L. Goldman. U. S. G. S., Bull. 381, p. 317. 24 pages. I. 1908.
- COAL OF THE DENVER BASIN, COLORADO. By G. C. Martin. U. S. G. S., Bull. 381, p. 297. 10 pages. 1908.
- THE COAL FIELD BETWEEN DURANGO, COLORADO, AND MONERO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.
- THE DURANGO COAL DISTRICT, COLORADO. By J. A. Taft. U. S. G. S., Bull. 316, p. 321. 18 pages. I. 1906.
- THE BOOK CLIFFS COAL FIELD, BETWEEN GRAND RIVER, COLORADO, AND SUNNYSIDE, UTAH. By G. B. Richardson. U. S. G. S., Bull. 316, p. 302. 18 pages. I. 1906.
- RECONNAISSANCE OF THE BOOK CLIFFS COAL FIELD. By G. B. Richardson. U. S. G. S., Bull. 371. 54 pages. I. 1909.
- MINING COAL IN SOUTHERN COLORADO. By K. S. Guiterman. E. & M. J., vol. 88, p. 1009. 20½ columns. I.
- COAL FIELDS OF SOUTHERN COLORADO. M. & M., vol. 30, p. 588. 3½ columns. I.
- COAL MINING AT PRIMERO, COLORADO. By R. L. Herrick. M. & M., vol. 30, p. 598. 2½ columns. I.
- THE DELAGUA COAL MINES, COLORADO. By F. W. Whiteside. M. & M., vol. 29, p. 317. 4½ columns. I.
- THE NORTH-DAKOTA-MONTANA LIGNITE AREA. By A. G. Leonard. U. S. G. S., Bull. 285, p. 316. 14 pages. 1905.
- THE SENTINEL BUTTE LIGNITE FIELD, NORTH DAKOTA AND MONTANA. By A. G. Leonard and C. D. Smith. U. S. G. S., Bull. 341, p. 15. 21 pages. I. 1907.
- THE WASHBURN LIGNITE FIELD, NORTH DAKOTA. By C. D. Smith. U. S. G. S., Bull. 381, p. 19. 11 pages. I. 1908.
- THE FORT BERTHOLD INDIAN RESERVATION LIGNITE FIELD, NORTH DAKOTA. By C. D. Smith. U. S. G. S., Bull. 381, p. 30. 10 pages. I. 1908.
- THE KENT COALFIELD IN ENGLAND. E. & M. J., vol. 87, p. 910. 1½ columns.
- THE WEMYSS COAL-FIELD, ENGLAND. By J. Gemmell. T. I. M. E., vol. 36, p. 555. 20 pages.
- SCOTTISH "EENTIE" COAL. By C. T. Clough. T. I. M. E., vol. 37, p. 2. 10 pages. I.
- UPPER SILESIA COAL MINES. By F. Haas. M. & M., vol. 30, p. 471. 5½ columns.
- BIBLIOGRAPHY OF ILLINOIS COAL AND ITS UTILIZATION. J. W. Soc. E., vol. 14, p. 326. 2½ pages.
- STUDIES OF ILLINOIS COALS. By H. F. Bain. T. A. I. M. E., vol. 40, p. 3. 72 pages. I.
- ILLINOIS COAL STATISTICS. M. & M., vol. 31, p. 357. ½ column.
- THE COAL MINING INDUSTRY IN ILLINOIS DURING 1908. E. & M. J., vol. 88, p. 77. 4 columns.
- THE KINGSTON COAL MINES, PEORIA COUNTY, ILLINOIS. By C. S. Richardson. Min. Mag., vol. 4, p. 379, 7½ pages; vol. 5, p. 1, 24 pages.
- THE ILLINOIS COAL FIELD. By A. Bement. J. W. Soc. E., vol. 14, p. 305. 70 pages. I.

- THE COAL RESOURCES OF ILLINOIS. T. A. I. M. E., vol. 40, p. 7. 10 pages. I
- THE ILLINOIS COAL FIELD By A. Bement M & M, vol. 30, p. 709. 7 columns I
- THE ILLINOIS COAL FIELD. By H. H. Stoek. M. & M., vol. 31, p. 54. 6 columns Map.
- COAL INVESTIGATION IN THE SALINE-GALLATIN FIELD, ILLINOIS, AND THE ADJOINING AREA. By F. W. De Wolf U. S. G. S., Bull. 316, p. 116. 20 pages I. 1906.
- STRATIGRAPHY AND COAL BEDS OF THE INDIANA COAL FIELD By G. H. Ashley. U. S. G. S., Bull. 381, p. 9. 10 pages 1908.
- MINING COAL IN SOUTHERN INDIANA. By F. W. Parsons. E & M J., vol. 90, p. 869. 11 columns. I
- COALFIELDS OF IOWA AND MISSOURI. By H. Hinds M & M., vol. 31, p. 80. 4½ columns. I. Map.
- NOTES ON THE TAKASIMA COAL MINES, NAGASAKI, JAPAN. By E. W. Nardin T. A. I. M. E., vol. 8, pt. 1, p. 81 6 pages. I.
- SOUTHERN KANSAS COAL DISTRICT. By L. L. Wittich M & M., vol. 31, p. 668. 7½ columns. I.
- THE KANSAS STATE COAL MINE. By C. M. Young E & M. J., vol. 89, p. 1159. 9½ columns I.
- COAL RESOURCES OF THE KENOVA QUADRANGLE, KENTUCKY. By W. C. Phalen U. S. G. S., Bull. 285, p. 209. 10 pages. I. 1905.
- THE ELKHORN COAL FIELD, KENTUCKY. By R. W. Stone U. S. G. S., Bull. 316, p. 42 15 pages. I. 1906.
- THE MIDDLESBORO COALFIELD IN KENTUCKY. By J. Howard. E. & M. J., vol. 88, p. 314. 8 columns. I.
- GEOLOGY AND MINERAL RESOURCES OF THE CUMBERLAND GAP COAL FIELD, KENTUCKY. By G. H. Ashley and L. C. Glenn. U. S. G. S., Professional Paper 49, 239 pages. I. 1906.
- COAL RESOURCES OF THE RUSSELL FORK BASIN (KENTUCKY-VIRGINIA). By R. W. Stone. U. S. G. S., Bull. 348 127 pages. I 1908.
- THE MIDDLESBORO COAL FIELD, KENTUCKY. By J. Howard. E. & M. J., vol. 85, p. 166. 10 columns I.
- MINING COAL IN BIG STONE GAP FIELD, KENTUCKY. By J. P. Shippen. E. & M. J., vol. 85, p. 1287. 11 columns. I.
- COAL MINES OF MEXICO. By M. Schwarz M. & M., vol. 29, p. 33. 3 columns I.
- THE COAL INDUSTRY IN MEXICO. By E. Ludlow. E. & M. J., vol. 88, p. 661. 10½ columns. I.
- COAL IN COAHUILA, MEXICO By E. Ordoñez. Min & Sci Press, vol. 96, p. 363 3½ columns. Map.
- THE CARBONIFEROUS DEPOSITS OF NORTHERN COAHUILA. By J. G. Aguilera. E. & M. J., vol. 88, p. 730. 9½ columns.
- COAL AND IRON EXPLORATIONS IN OAXACA, MEXICO. By J. L. W. Birkinbine E & M J., vol. 90, p. 668. 10½ columns. I.
- COALFIELDS OF IOWA AND MISSOURI. By H. Hinds. M & M., vol. 31, p. 80. 4½ columns. I. Map.
- THE COAL INDUSTRY OF MONTANA. By J. P. Rowe. E & M. J., vol. 85, p. 1055. 12 columns. I.
- THE COAL MINING INDUSTRY OF MONTANA. By J. P. Rowe E & M J., vol. 87, p. 845. 16½ columns. I.
- THE GREAT FALLS COAL FIELD, MONTANA. By C. A. Fisher U. S. G. S., Bull. 316, p. 161 14 pages. I. 1906.
- THE GREAT FALLS COALFIELD IN MONTANA. By A. T. Shurick. E. & M. J., vol. 87, p. 587. 10½ columns. I.
- THE GREAT FALLS COAL FIELD OF MONTANA By C. A. Fisher. U. S. G. S., Bull. 356 87 pages. I. 1909.

- DEVELOPMENT OF THE BEAR CREEK COAL FIELDS, MONTANA. By C. A. Fisher. U. S. G. S., Bull. 285, p. 269. 2 pages. 1905.
- COAL NEAR THE CRAZY MOUNTAINS, MONTANA. By R. W. Stone. U. S. G. S., Bull. 341, p. 78. 14 pages. I. 1907.
- THE BULL MOUNTAIN COAL FIELD, MONTANA. By L. H. Woolsey. U. S. G. S., Bull. 341, p. 62. 16 pages. I. 1907.
- THE MILES CITY COAL FIELD, MONTANA. By A. J. Collier and C. D. Smith. U. S. G. S., Bull. 341, p. 36. 26 pages. I. 1907.
- THE COAL FIELDS OF PART OF DAWSON, ROSEBUD, AND CUSTER COUNTIES, MONTANA. By A. G. Leonard. U. S. G. S., Bull. 316, p. 194. 18 pages. I. 1906.
- COALS OF CARBON COUNTY, MONTANA. By N. H. Darton. U. S. G. S., Bull. 316, p. 174. 20 pages. I. 1906.
- THE LEWISTON COAL FIELD, MONTANA. By W. R. Calvert. U. S. G. S., Bull. 341, p. 108. 15 pages. I. 1907.
- THE LEWISTON COAL FIELD, MONTANA. By W. R. Calvert. U. S. G. S., Bull. 390. 83 pages. I. 1909.
- THE MILK RIVER COAL FIELD, MONTANA. By L. J. Pepperberg. U. S. G. S., Bull. 381, p. 82. 26 pages. I. 1908.
- THE CENTRAL PART OF THE BULL MOUNTAIN COAL FIELD, MONTANA. By R. W. Richardson. U. S. G. S., Bull. 381, p. 60. 22 pages. I. 1908.
- THE FORT PECK INDIAN RESERVATION LIGNITE FIELD, MONTANA. By C. D. Smith. U. S. G. S., Bull. 381, p. 40. 20 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA. By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- THE RED LODGE COAL FIELD, MONTANA. By E. G. Woodruff. U. S. G. S., Bull. 341, p. 92. 16 pages. I. 1907.
- NOTES ON THE COALS OF THE CUSTER NATIONAL FOREST, MONTANA. By C. H. Wegemann. U. S. G. S., Bull. 381, p. 108. 7 pages. I. 1908.
- THE COAL MINES OF DAWSON, NEW MEXICO. By J. E. Sheridan. M. & M., vol. 31, p. 653. 9½ columns. I.
- THE ENGLE COAL FIELD, NEW MEXICO. By W. T. Lee. U. S. G. S., Bull. 285, p. 240. 1 page. 1905.
- THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By F. C. Schrader. U. S. G. S., Bull. 285, p. 241. 19 pages. I. 1905.
- A RECONNAISSANCE SURVEY OF THE WESTERN PART OF THE DURANGO-GALLUP COAL FIELD OF COLORADO AND NEW MEXICO. By M. K. Shaler. U. S. G. S., Bull. 316, p. 376. 50 pages. I. 1906.
- THE COAL-MINES AND PLANT OF THE STAG CAÑON FUEL Co., DAWSON, NEW MEXICO. By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- THE UNA DELL GATO COAL FIELD, SANDOVAL COUNTY, NEW MEXICO. By M. R. Campbell. U. S. G. S., Bull. 316, p. 427. 4 pages. I. 1906.
- COAL IN THE VICINITY OF FORT STANTON RESERVATION, LINCOLN COUNTY, NEW MEXICO. By M. K. Campbell. U. S. G. S., Bull. 316, p. 431. 4 pages. I. 1906.
- THE COAL FIELD BETWEEN GALLINA AND RATON SPRINGS, NEW MEXICO, IN THE SAN JUAN COAL REGION. By J. H. Gardner. U. S. G. S., Bull. 341, p. 335. 17 pages. I. 1907.
- THE COAL FIELD BETWEEN DURANGO, COLORADO, AND MONERO, NEW

- MEXICO By J. H. Gardner. U. S. G. S., Bull. 341, p. 352. 12 pages. I. 1907.
- THE COAL FIELD BETWEEN GALLUP AND SAN MATEO, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 341, p. 364. 15 pages. I. 1907.
- ISOLATED COAL FIELD IN SANTA FE AND SAN MIGUEL COUNTIES, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 447. 5 pages. 1908.
- THE CARTHAGE COAL FIELD, NEW MEXICO. By J. H. Gardner. U. S. G. S., Bull. 381, p. 452. 9 pages. I. 1908.
- THE COAL FIELD BETWEEN SAN MATEO AND CUBA, NEW MEXICO By J. H. Gardner. U. S. G. S., Bull. 381, p. 461. 13 pages. I. 1908.
- CARBONACEOUS COAL IN NEW MEXICO By J. H. Gardner. M & M, vol. 30, p. 570. 2½ columns. I.
- THE RICH COALFIELDS IN NEW MEXICO. E. & M. J., vol. 86, p. 1251. 1½ columns.
- THE COAL MINES AND PLANT OF THE STAG CAÑON FUEL COMPANY, DAWSON, NEW MEXICO By J. E. Sheridan. T. A. I. M. E., vol. 40, p. 354. 24 pages. I.
- COAL MINING IN PICTOU COUNTY, NOVA SCOTIA. By H. E. Coll. E. & M. J., vol. 85, p. 1101. 7 columns. I.
- DOMINION No. 2 COLLIERY OF THE DOMINION COAL COMPANY. By A. G. Haultain. J. C. M. I., vol. 13, p. 641. 14 pages. I.
- THE OKLAHOMA COAL FIELDS. By C. N. Gould. M & M., vol. 29, p. 275. 2½ columns. I.
- COAL MINING IN OKLAHOMA By W. P. Thomas. M & M., vol. 31, p. 193. 5 columns. I. Map.
- GEOLOGY OF THE MCALISTER COAL FIELD, INDIAN TERRITORY. By J. A. Taff. U. S. G. S., 19th Ann. Rept., pt. 3. pp. 423-600. 1897-98. I.
- GEOLOGY OF EASTERN CHOCTAW COAL FIELD, INDIAN TERRITORY By J. A. Taff and G. I. Adams. U. S. G. S., 21st Ann. Rept., pt. 2, pp. 257-311. 1899-1900. I.
- A COAL PROSPECT ON WILLOW CREEK, MORROW COUNTY, OREGON By W. C. Mendenhall. U. S. G. S., Bull. 341, p. 406. 3 pages. 1907.
- THE ROGUE RIVER VALLEY COAL FIELD, OREGON. By J. S. Diller. U. S. G. S., Bull. 341, p. 401. 5 pages. I. 1907.
- A GENERAL VIEW OF THE ANTHRACITE COAL REGION OF PENNSYLVANIA By H. W. Poole. Min. Mag., vol. 4, p. 245. 4 pages.
- THE LACKAWANNA COAL BASIN: Its Geology and Mining Resources around Scranton, Pennsylvania. By H. D. Rogers. Min. Mag., vol. 2, p. 388, 6 pages, p. 475, 15 pages, I.; p. 609, 12 pages.
- PROPERTY OF THE SHORT MOUNTAIN COAL COMPANY, LYKEN'S VALLEY, PENNSYLVANIA. Min. Mag., vol. 1, p. 468. 7½ pages.
- THE SOUTHERN ANTHRACITE COAL-FIELD By J. H. Haerther. E. & M. J., vol. 85, p. 653. 9 columns. I.
- ANTHRACITE COAL MINING By H. C. Chance. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.
- COAL MINING IN SOUTHERN ANTHRACITE FIELD. By T. F. Downing. E. & M. J., vol. 86, p. 475. 10 columns. I.
- MOREA COLLIERY BASIN, NORTHEASTERN PENNSYLVANIA. M. & M., vol. 30, p. 730. 1½ columns. I.
- THE TUNUNGWANT COAL FIELD OF MCKEAN COUNTY, PENNSYLVANIA. By D. D. Owen. Min. Mag., vol. 9, p. 244, 12 pages; p. 306, 10 pages.
- THE LYCOMING IRON AND COAL COMPANY, PENNSYLVANIA. Min. Mag., vol. 1, p. 455. 13½ pages.

- THE COAL LANDS OF THE CLINTON COUNTY COAL COMPANY, PENNSYLVANIA. Min. Mag, vol 3, p. 513. 5½ pages
- SMITHING COAL OF PENNSYLVANIA 2d Geol. Rept. Pa., G, p 202. 10 pages
- THE SAGMORE BITUMINOUS COAL MINES, CLEARFIELD DISTRICT, PENNSYLVANIA. By E. K. Judd. E. & M. J., vol. 85, p. 605 6 columns I.
- A TYPICAL RIVER MINE IN PENNSYLVANIA. By F. W. Parsons. E. & M. J., vol. 89, p. 326. 18 columns I.
- DONOHUE COKE COMPANY, NEAR GREENSBURG, PENNSYLVANIA By C. R. King. M. & M., vol. 29, p. 445. 7½ columns. I.
- BUFFALO-SUSQUEHANNA SAGMORE MINE. By R. D. N. Hall. M. & M. vol. 31, p. 645. 8½ columns. I.
- THE JENNER MINE OF THE SOMERSET COAL COMPANY, PENNSYLVANIA By J. L. Wagner. M. & M., vol. 29, p. 323. 2½ columns. I.
- COAL RESOURCES OF JOHNSTOWN, PENNSYLVANIA AND VICINITY. By W. C. Phalen. U. S. G. S., Bull. 316, p. 20. 22 pages I. 1906
- COALS OF THE CLARION QUADRANGLE, CLARION COUNTY, PENNSYLVANIA By E. F. Lines. U. S. G. S., Bull. 316, p. 13. 9 pages. I. 1906.
- THE PUNKSUTAWNEY AND GLEN CAMPBELL COAL FIELDS OF INDIANA AND JEFFERSON COUNTIES, PENNSYLVANIA. By F. B. Peck and G. H. Ashley. U. S. G. S., Bull. 285, p. 276. 4 pages. 1905.
- CLEARFIELD COAL FIELD, PENNSYLVANIA. By G. H. Ashley. U. S. G. S., Bull. 285, p. 271. 5 pages. I. 1905.
- THE MARIANNA COAL MINES. By H. M. Phelps. M. & M., vol. 31, p. 523. 7½ columns. I.
- THE COAL DEPOSITS OF PERU By Z. C. B. Borkhof. E. & M. J., vol. 88, p. 983 1½ columns.
- PHILIPPINE COAL MINES. Min. & Sci. Press, vol. 100, p. 323. 2 columns.
- MINING COAL IN THE PHILIPPINE ISLANDS By R. Hawxhurst. E. & M. J., vol. 88, p. 879. 4 columns.
- PHILIPPINE COAL FIELDS. By J. B. Dilworth. T. A. I. M. E., vol. 39, p. 653. 11 pages. I.
- PHILIPPINE COALS. By A. J. Cox. E. & M. J., vol. 86, p. 1058 4 columns.
- THE COAL FIELDS OF BRISTOL COUNTY AND OF RHODE ISLAND By E. Hitchcock. Min. & Mag, vol. 1, p. 582. 10 pages.
- COAL MINING ON THE KIRGHESE STEPPE IN THE AKMOKINSK DISTRICT OF SOUTH-WESTERN SIBERIA. By E. Watson. T. I. M. E., vol. 37, p. 124. 10 pages. I.
- MINING COAL IN SPITZBERGEN, NORWAY. By T. Collot. E. & M. J., vol. 88, p. 1274. 2 columns. I.
- THE WIND ROCK COAL MINE, TENNESSEE. By W. S. Hutchinson. M. & M., vol. 31, p. 1. 6 columns. I.
- COAL IN TENNESSEE. Min. Mag, vol. 8, p. 450. 10 pages
- THE CUMBERLAND COAL FIELDS, TENNESSEE By J. P. Lestey. Min. Mag., vol. 5, p. 45 13 pages I.
- COAL IN TURKEY. Min. & Sci. Press, vol. 98, p. 821. 3 columns.
- THE COAL FIELDS OF THE UNITED STATES. By M. R. Campbell and E. W. Parker. T. A. I. M. E., vol. 40, p. 253. 8 pages.
- THE COALFIELDS OF THE UNITED STATES. E. & M. J., vol. 87, p. 160. 8 columns. I.
- PACIFIC COAST COALS. Min. & Sci. Press, vol. 22, p. 216. ½ column.
- ANTHRACITE COAL ON THE PACIFIC COAST E. & M. J., vol. 90, p. 920. 1 column. I.

- COAL MINING IN THE MIDDLE WEST
By G H Cushing Min & Sci.
Press, vol. 100, p. 130. 3½ columns
- FUEL IN THE INTERMOUNTAIN REGION.
By D Harrington M & M., vol.
29, p 493. 4½ columns
- THE BARREN ZONE OF THE NORTHERN
APPALACHIAN COALFIELD. By I C.
White. E. & M J, vol 87, p 509.
1½ columns
- THE NORTHERN APPALACHIAN COAL-
FIELD By R N Hosler E &
M. J, vol. 89, p 1122. 8½ columns.
- THE COAL FIELDS OF THE UNITED
STATES. By M R Campbell and
E. W Parker. T A. I M. E,
vol 40, p. 253 8 pages
- COAL BEDS OF PLEASANT VALLEY,
UTAH E. & M J, vol 85, p 964.
½ column
- THE PLEASANT VALLEY COAL DIS-
TRICT, CARBON AND EMERY COUN-
TIES, UTAH By J A Taff. U S
G S, Bull 316, p. 338 21 pages
D 1906
- COAL FIELDS OF NORTHWESTERN COLO-
RADO AND NORTHEASTERN UTAH.
By H S. Gale U S G S, Bull
341, p 283. 35 pages. I 1907.
- COAL FIELDS OF NORTHEASTERN COLO-
RADO AND NORTHWESTERN UTAH
By H. S Gale. U S G S, Bull.
415 265 pages. I. 1910
- NOTES ON THE WEBER RIVER COAL
FIELD, UTAH. By J A Taff. U S.
G. S, Bull 285, p. 285. 4 pages.
1905.
- COAL IN SANPETE COUNTY, UTAH By
G. B Richardson. U. S G. S,
Bull. 285, p. 280. 7 pages. I.
1905.
- THE IRON COUNTY COAL FIELD, UTAH.
By W. T. Lee U S. G. S, Bull.
316, p 359. 20 pages. I 1906.
- THE HARMONY, CLOB, AND KANAB
COAL FIELDS, SOUTHERN UTAH. By
G. B. Richardson. U. S G S, Bull.
341, p. 379. 22 pages. I. 1907.
- BOOK CLIFFS COAL FIELD, UTAH, WEST
OF GREEN RIVER By J A. Taff
U S G S, Bull 285, p. 289. 14
pages I 1905
- CONSOLIDATED FUEL COMPANY, UTAH.
By R J. Turner M & M, vol 31,
p 385. 4 columns I.
- THE POCKET COAL DISTRICT, VIR-
GINIA, IN THE LITTLE BLACK MOUN-
TAIN COAL FIELD. By C A. Fisher.
U S G. S, Bull. 341, p. 409. 10
pages I 1907.
- THE RUSSELL FORK COAL FIELD, VIR-
GINIA. By R. W Stone U S.
G S, Bull 316, p 55 14 pages I.
1906
- THE COAL RESOURCES OF WASHINGTON.
By R P. Tait M & M, vol 30,
p 17, 6 columns, I; p 108, 6 col-
umns, I; p. 135, 7 columns, I; p. 311.
8 columns, I
- NOTES ON THE COAL INDUSTRY IN
WEST VIRGINIA. By R. B Brins-
made. E & M J., vol 90, p. 775.
4½ columns
- UPPER POTOMAC COAL FIELDS, WEST
VIRGINIA. By H. H Stoek M &
M, vol 30, p. 201. 8 columns. I
- COAL MINING IN CENTRAL WEST VIR-
GINIA. By F. W Parsons. E &
M J., vol. 87, p 1284. 16 col-
umns. I.
- COAL FIELDS OF CENTRAL WEST VIR-
GINIA. By H H. Stoek. M & M,
vol 30, p. 188. 10 columns. I.
- COAL FIELDS OF WEST VIRGINIA By
H. H. Stoek. M. & M, vol. 29,
p. 219, 6½ columns, I, p. 283, 7½
columns, I. Map; p. 303, 8½ columns,
I.; p. 509, 11½ columns, I
- THE KANAWHA REGION, WEST VIR-
GINIA By H H Stoek. M & M,
vol 30, p. 36, 9 columns, I; p. 70,
8½ columns, I.
- COAL MINING IN KANAWHA VALLEY,
WEST VIRGINIA. By S. M. Buck.
U S. G S., Mineral Resources, 1883
and 1884.

- NEW RIVER COALFIELD, WEST VIRGINIA. By H. H. Stoek. M. & M., vol. 29, p. 509. 11½ columns. I.
- CORRELATION THACKER FIELD, WEST VIRGINIA. By A. H. Stow. M. & M., vol. 31, p. 83. 4½ columns. I.
- THE THICKEST COAL SEAM: Wyoming. E. & M. J., vol. 86, p. 1169. ¼ column.
- A MODEL COAL MINING PLANT IN WYOMING. By H. M. Payne. E. & M. J., vol. 90, p. 224. 8½ columns. I.
- COAL AND OIL IN SOUTHERN UTAH COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.
- THE WESTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball. U. S. G. S., Bull. 341, p. 243. 12½ pages. I. 1907.
- THE EASTERN PART OF THE LITTLE SNAKE RIVER COAL FIELD, WYOMING. By M. W. Ball and E. Stebinger. U. S. G. S., Bull. 381, p. 186. 28 pages. I. 1908.
- THE NORTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 341, p. 256. 27 pages. I. 1907.
- THE SOUTHERN PART OF THE ROCK SPRINGS COAL FIELD, SWEETWATER COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 381, p. 214. 68 pages. I. 1908.
- COAL FIELDS OF THE NORTHEAST SIDE OF THE BIGHORN BASIN, WYOMING, AND OF BRIDGER, MONTANA. By C. W. Washburne. U. S. G. S., Bull. 341, p. 165. 35 pages. I. 1907.
- COAL FIELDS OF THE SOUTHWEST SIDE OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 341, p. 200. 18 pages. I. 1907.
- THE COAL FIELD IN THE SOUTHEASTERN PART OF THE BIGHORN BASIN, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 381, p. 170. 16 pages. I. 1908.
- COAL FIELDS OF EAST-CENTRAL CARBON COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 316, p. 244. 16 pages. I. 1906.
- COAL FIELDS IN A PORTION OF CENTRAL UTAH COUNTY, WYOMING. By A. R. Schultz. U. S. G. S., Bull. 316, p. 212. 30 pages. I. 1906.
- THE BUFFALO COAL FIELD, WYOMING. By H. S. Gale and C. H. Wegeman. U. S. G. S., Bull. 381, p. 137. 32 pages. I. 1908.
- THE EASTERN PART OF THE GREAT DIVIDE BASIN COAL FIELD, WYOMING. By E. E. Smith. U. S. G. S., Bull. 341, p. 220. 23 pages. I. 1907.
- THE POWDER RIVER COAL FIELD, WYOMING, ADJACENT TO THE BURLINGTON RAILROAD. By R. W. Stone and C. T. Lupton. U. S. G. S., Bull. 381, p. 115. 22 pages. I. 1908.
- COAL OF LARAMIE BASIN, WYOMING. By C. E. Siebenthal. U. S. G. S., Bull. 316, p. 261, 3 pages. 1906.
- COAL AND OIL IN SOUTHERN UTAH COUNTY, WYOMING. By A. C. Veatch. U. S. G. S., Bull. 285, p. 331. 23 pages. I. 1905.
- THE SHERIDAN COAL FIELD, WYOMING. By J. A. Taff. U. S. G. S., Bull. 341, p. 123. 14 pages. 1907.
- GEOGRAPHY AND GEOLOGY OF A PORTION OF SOUTHWESTERN WYOMING, WITH SPECIAL REFERENCE TO COAL AND OIL. By A. C. Veatch. U. S. G. S., Professional Paper 56, 178 pages. I. 1907.
- THE COAL MINES OF SOUTHERN WYOMING. By F. W. Parsons. E. & M. J., vol. 85, p. 118. 6½ columns. I.
- THE DIAMONDVILLE COALFIELD, WYOMING. By A. T. Shurick. E. & M. J., vol. 85, p. 116. 6 columns. I.

- THE GLENROCK COAL FIELD, WYOMING.** By E. W. Shaw. U. S. G. S., Bull. 341, p. 151 14 pages I. 1907.
- THE LANDER COAL FIELD, WYOMING.** By E. G. Woodruff U. S. G. S., Bull. 316, p. 242 2 pages 1906
- See also **MAPS OF COUNTRIES AND DISTRICTS.**
- See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES**
- See also **THE COAL TRADE**
- Occurrence of Copper and Copper Ores**
- COPPER PROSPECTS.** By T. L. Carter. P. C. M. & M. Soc. S. A., vol. 5, p. 305, 9 columns, I.; vol. 6, p. 80, $\frac{1}{2}$ column, p. 111, $\frac{1}{2}$ columns.
- KATANGA COPPER BELT, BELGIAN CONGO** By F. E. Studt. Min. & Sci. Press, vol. 99, p. 857 $\frac{1}{2}$ columns.
- THE COPPER DEPOSITS OF KATANGA, CONGO.** E. & M. J., vol. 86, p. 1049 2 columns
- THE COPPER MINES OF KATANGA, CONGO FREE STATE** E. & M. J., vol. 85, p. 202 $\frac{3}{4}$ columns.
- COPPER IN THE BELGIAN CONGO.** T. A. I. M. E., vol. 41, p. 196. 8 pages. I.
- COPPER DEPOSITS OF PRINCE WILLIAM SOUND, ALASKA.** By U. S. Grant Min. & Sci. Press, vol. 100, p. 63 4 columns. I.
- COPPER MINING AND PROSPECTING OF PRINCE WILLIAM SOUND.** By G. G. Grant and D. F. Higgins, Jr. U. S. G. S., Bull. 379, p. 87. 10 pages. I. 1908.
- NOTES ON COPPER PROSPECTS OF PRINCE WILLIAM SOUND.** By F. H. Moffit. U. S. G. S., Bull. 345, p. 176. 3 pages. I. 1907.
- OPENING OF THE CHITINA COPPER BELT IN ALASKA.** By D. Donohoe. E. & M. J., vol. 90, p. 1306. 6 columns. I.
- CHITINA COPPER REGION IN SOUTHERN ALASKA** By L. W. Storm. E. & M. J., vol. 90, p. 1011 $7\frac{1}{2}$ columns. Map.
- CHITINA VALLEY COPPER DEPOSITS, ALASKA** By E. Jacobs M. & M., vol. 31, p. 315. $6\frac{1}{2}$ columns. I.
- OCCURRENCE OF COPPER IN CHITINA VALLEY, ALASKA** M. & M., vol. 31, p. 315. $6\frac{1}{2}$ columns. I.
- BONANZA COPPER MINE, ALASKA.** By V. H. Wilhelm. Min. & Sci. Press, vol. 101, p. 569 $2\frac{1}{2}$ columns I.
- BONANZA COPPER MINE ALASKA** By V. H. Wilhelm. M. & M., vol. 31, p. 441. $1\frac{1}{2}$ columns. Map
- COPPER DEPOSITS OF WHITE HORSE** By T. A. Rickard Min. & Sci. Press, vol. 97, p. 778 $3\frac{1}{2}$ columns I.
- THE WHITE HORSE COPPER BELT, YUKON TERRITORY** E. & M. J., vol. 89, p. 963 $2\frac{1}{2}$ columns.
- WHITE RIVER COPPER PROPERTIES.** By G. A. R. Lewington. Min. & Sci. Press, vol. 99, p. 755. $2\frac{1}{2}$ columns. I.
- THE KENNICOTT BONANZA COPPER MINE, ALASKA.** By L. W. Storm. E. & M. J., vol. 89, p. 1224 $9\frac{1}{2}$ columns I.
- COPPER DEPOSITS ON KASAAN PENINSULA, PRINCE OF WALES ISLAND** By C. W. Wright and S. Page U. S. G. S., Bull. 345, p. 98. 18 pages. I. 1907.
- RECENT DEVELOPMENTS IN CLIFTON-MORENCI DISTRICT, ARIZONA.** By A. W. Hixson. E. & M. J., vol. 85, p. 251. $1\frac{1}{2}$ columns.
- ORE DEPOSITS OF THE CLIFTON-MORENCI DISTRICT OF ARIZONA.** Min. & Sci. Press, vol. 101, p. 770. $6\frac{1}{2}$ columns. Map.
- COPPER DEPOSITS OF SILVERBELL, ARIZONA.** By C. F. Tolman Min. & Sci. Press, vol. 99, p. 710. 5 columns. I.
- THE MIAMI COPPER MINE, ARIZONA.** By R. L. Herrick M. & M., vol. 30, p. 80 $9\frac{1}{2}$ columns. I.

- MINING AT MIAMI, ARIZONA. By R. L. Herrick M & M., vol 30, p 751. 12 columns I
- COPPER MINING IN METCALF DISTRICT, ARIZONA. By P B. Scotland E. & M. J., vol. 90, p. 118. 16 columns. I.
- DISSEMINATED CHALCOCITE DEPOSITS AT RAY, ARIZONA By C. F. Tolman, Jr. Min & Sci. Press, vol. 99, p 622 5½ columns. I
- RAY COPPER DISTRICT, ARIZONA By W. H. Truesdale. Min & Sci. Press, vol. 98, p. 794 7½ columns. I.
- UNITED VERDE MINE, ARIZONA. By L. C. Craton. Min & Sci. Press, vol. 96, p. 171. 1½ columns. Map.
- ORE DEPOSITS IN THE VICINITY OF PARKER, ARIZONA E. & M. J., vol. 88, p 1171. 2 columns.
- THE SUPERIOR AND BOSTON MINE, ARIZONA. By R L Herrick M & M., vol. 31, p 112 8½ columns. I.
- COPPER DEPOSITS OF THE GLOBE-KELVIN DISTRICTS, ARIZONA. By E. Higgins. E. & M. J, vol 89, p. 769, 11 columns, I.; p 813, 9½ columns, I.; p. 870, 13½ columns, I
- THE BISBEE COPPER FIELD. Min. & Sci. Press, vol. 99, p. 358. 3 columns. I.
- STANLEY BUTTE DISTRICT, ARIZONA. By F. Wolf, Jr. Min. & Sci. Press, vol. 101, p 13. 1½ columns. Map.
- COURTLAND, ARIZONA, A NEW CAMP. By H. W. Chittenden. E. & M J., vol. 87, p. 312 1½ columns.
- THE SOUTHERN ARIZONA COPPER FIELDS. By C. F. Tolman, Jr. Min. & Sci. Press, vol. 99, p 356, 10 columns, I.; p. 390, 7½ columns, I
- THE MOUNT LYELL MINING FIELD. By J. W Gregory. T. Au. I. M. E., vol. 10, p 29. 169 pages
- THE ORE DEPOSITS OF MOUNT LYELL: Copper Deposits. By J. W. Gregory. T. Au. I. M. E., vol. 10, p. 113. 34 pages. I.
- NOTES ON MOUNT READ AND ITS SULPHIDE ORE BODIES. By L. Williams. T. Au. I. M. E., vol 8, pt. 1, p. 74. 6 pages.
- COPPER MINES IN CHILLAGOE DISTRICT, QUEENSLAND By G W. Williams. E. & M. J, vol 87, p. 1125. 6 columns. I.
- THE MANY PEAKS COPPER MINE, QUEENSLAND, AUSTRALIA. By J. B. Wilson. E. & M. J., vol 88, p 872. 7½ columns. I
- THE CLONCURRY COPPER DISTRICT, QUEENSLAND. By G. W. Williams. E. & M. J, vol 88, p. 155 13½ columns. I
- COBAR GOLD AND COPPER FIELD, NEW SOUTH WALES. By G. W. Williams. E. & M J, vol. 86, p. 957. 4 columns. I.
- BEDDED COPPER DEPOSITS OF CARANGAS, BOLIVIA By R Hawxhurst, Jr E & M. J., vol. 90, p. 909. 12½ columns. I
- NOTES ON THE TYEE COPPER MINE. By W. H. Weed E & M. J., vol. 85, p. 199. 6½ columns. I.
- FURTHER OBSERVATIONS RELATIVE TO THE OCCURRENCE OF DEPOSITS OF COPPER ORE ON THE NORTH PACIFIC COAST AND ADJACENT ISLANDS, FROM THE SOUTHERN BOUNDARY OF BRITISH COLUMBIA TO THE ALASKAN PENINSULA. By W. M. Brewer. J. C. M. I., vol 10, p. 195. 14 pages.
- MINES OF THE GRANBY CONSOLIDATED, PHOENIX, BRITISH COLUMBIA By R H Allen. E & M. J, vol 88, p. 1260 7 columns. I.
- THE OCCURRENCE OF COPPER IN SHASTA COUNTY, CALIFORNIA By L. C. Graton. U. S. G. S, Bull. 430, p. 71 40½ pages. I. 1909.
- THE BALAKLALA CONSOLIDATED COPPER COMPANY, CALIFORNIA. E. & M. J., vol. 87, p. 501 9 columns. I.
- PRIMARY CHALCOCITE IN CALIFORNIA. By O. H. Hershey. Min. & Sci. Press, vol. 96, p. 429. 3 columns.
- THE GENESIS OF THE COPPER ORES IN SHASTA COUNTY, WEST OF THE SACRAMENTO RIVER. By W. For-

- estner. Min. & Sci Press, vol. 97, p. 261 3 columns
- COPPER MINES AND SMELTERIES OF SEASTA COUNTY, CALIFORNIA By G. A. Packard. E & M J, vol 88, p. 393. 20½ columns. I.
- THE CALAMA COPPER DISTRICT, CHILE. By F. A. Smith. M & M, vol. 31, p. 473. 4 columns. I
- THE BRADEN COPPER MINES, CHILE. By W. Braden. M. & M, vol. 30, p. 506. 1½ columns.
- THE COLLAHUASI COPPER DISTRICT, CHILE. By R. Hawkhurst. Min. Mag, London, vol. 3, p 271 14 columns. I.
- THE PODEROSA COPPER MINE, COLLAHUASI, CHILE. By Robt Hawkhurst, Jr. E. & M J, vol. 85, p. 490 4 columns
- THE EVERGREEN COPPER-DEPOSIT, COLORADO. By E. A. Ritter. T. A. I. M. E, vol. 38, p. 751. 15 pages. I.
- NOTES ON COPPER DEPOSITS IN CHAFFEE, FREMONT, AND JEFFERSON COUNTIES, COLORADO By W. Lindgren U S G S, Bull 340, p. 157. 18 pages. I. 1907
- THE OLD BRISTOL COPPER MINE, CONNECTICUT. By C. S. Richardson Min. Mag, vol 3, p. 251 5 pages.
- CANTON COPPER MINE, CHEROKEE COUNTY, GEORGIA. By J. Derby. Min. Mag, vol. 5, p. 395 2½ pages.
- THE WHITE KNOB COPPER DEPOSITS, MACKAY, IDAHO. By J. F. Kemp and C. G. Gunther. T. A. I. M. E., vol. 38, p. 269. 29 pages I.
- SNOWSTORM COPPER DEPOSIT, IDAHO. Min & Sci Press, vol. 97, p 701. 2½ columns. I.
- NOTES ON THE FORT HALL MINING DISTRICT, IDAHO. By F B Weeks and V. C. Heikes U. S. G. S, Bull. 340, p. 175. 10 pages. I. 1907.
- COPPER IN JAMAICA. Min. & Sci. Press, vol. 99, p. 299. ½ column.
- THE KAPSAM MINES, KOREA Min. & Sci Press, vol 99, p 666 2½ columns.
- THE KOSAN MINE, KOREA By A. D. Weigall Min. & Sci Press, vol. 97, p. 878 2½ columns.
- THE KOSAKA COPPER MINE OF JAPAN. Min & Sci. Press, vol 101, p 503. 1 column.
- THE CANANEA CONSOLIDATED COPPER COMPANY IN 1908 By L D Ricketts. E. & M. J, vol. 87, p. 701. 13 columns
- REVIVAL IN URES, HERMOSILLO AND SAHUARIPA DISTRICTS, SONORA By W L Wilson. E & M J, vol. 90, p. 661. 3 columns
- SAN ANTONIO COPPER DISTRICT, SONORA, MEXICO. E & M J, vol. 90, p. 1301. 3½ columns D.
- ORE DEPOSITS OF CANANEA MINING DISTRICT, MEXICO. By S. F. Emmons E. & M J., vol. 90, p. 402. 5 columns. Map.
- LOS PILARES MINE, NACOAARI, MEXICO. By C. De Kalb. Min & Sci. Press, vol. 100, p 887. 6½ columns. I
- ORE DEPOSITS OF THE NACOAARI DISTRICT, MEXICO E. & M. J, vol. 86, p 658. 1½ columns
- NACOAARI MINING DISTRICT, SONORA, MEXICO. By B. E Russell . E & M. J, vol. 86, p 657. 16 columns. I.
- THE MAGISTRAL COPPER DISTRICT, MEXICO. By P. A. Babb. E & M. J, vol. 88, p. 1215. 4½ columns I.
- COPPER-BEARING ROCKS OF LAKE SUPERIOR By R. D. Irving U S. G. S, 3d Ann. Rept, pp. 89-188. 1881-82 I.
- THE COPPER-BEARING ROCKS OF LAKE SUPERIOR. By R. D. Irving. U. S. G. S., Monograph V. 464 pages. I. 1883.
- THE LAKE SUPERIOR COPPER MINES. By J. A. Callender. Min Mag., vol. 2, p. 249. 3 pages.

- FOOTHILL COPPER BELT OF THE SIERRA NEVADA.** By J. A. Reid. *Min. & Sci. Press*, vol. 96, p. 388. 9½ columns. I.
- THE YERINGTON DISTRICT, NEVADA.** By C. S. Durand. *M. & M.*, vol. 31, p. 24. 2½ columns. I.
- THE YERINGTON COPPER DISTRICT, NEVADA.** By J. A. Carpenter. *Min. & Sci. Press*, vol. 101, p. 4. 10½ columns. I.
- YERINGTON COPPER DISTRICT.** By F. L. Ransome. *Min. & Sci. Press*, vol. 100, p. 354 4½ columns. Map.
- CONDITIONS IN THE YERINGTON COPPER DISTRICT, NEVADA.** By J. Tyssowski. *E. & M. J.*, vol. 89, p. 764. 6½ columns. I.
- THE YERINGTON COPPER DISTRICT, NEVADA.** By F. L. Ransome. *U. S. G. S.*, Bull. 380, p. 99. 21 pages. I. 1908.
- THE YERINGTON COPPER DEPOSITS** By F. L. Ransome. *M. & M.*, vol. 30, p. 88. 6 columns. I.
- SECONDARY COPPER ORES OF THE LUDWIG MINE, YERINGTON, NEVADA.** By J. P. Jennings. *J. C. M. I.*, vol. 11, p. 463. 3½ pages.
- RAY CONSOLIDATED MINES, NEVADA.** By R. L. Herrick. *M. & M.*, vol. 29, p. 544. 6½ columns. I.
- COPPER MINING AT ELY, NEVADA.** By C. De Kalb. *Min. & Sci. Press*, vol. 98, p. 58. 6 columns. I.
- PRESENT CONDITIONS OF ELY.** *Min. & Sci. Press*, vol. 100, p. 866. 5½ columns. I.
- THE COPPER LODES OF NEW CALLEDONIA.** By E. A. Wernberg. *T. A. I. M. E.*, vol. 7, p. 138. 12 pages. I.
- COPPER MINING IN NEW JERSEY.** By H. B. Kümmel. *E. & M. J.*, vol. 87, p. 808. 2 columns.
- BURRO MOUNTAIN MINING DISTRICT, NEW MEXICO.** *E. & M. J.*, vol. 89, p. 1121. 3 columns. I.
- BURRO MOUNTAIN MINING DISTRICT.** By I. J. Stauber. *M. & M.*, vol. 30, p. 380. 4½ columns. I.
- THE COPPER DEPOSITS OF SOUTH MOUNTAIN IN SOUTHERN PENNSYLVANIA.** By G. W. Stose. *U. S. G. S.*, Bull. 430, p. 122. 10 pages. I. 1909.
- COPPER IN THE PHILIPPINES.** By W. D. Smith. *E. & M. J.*, vol. 89, p. 30. 1 column.
- THE ATBASAR COPPER DISTRICT.** By W. Pellet-Harvey. *Min. Mag.*, London, vol. 2, p. 59. 8 columns. I.
- NOTES ON THE ZANGEZOUR COPPER MINES.** By A. L. Simon. *T. I. M. & M.*, vol. 18, p. 413. 12 pages.
- THE RIO TINTO COPPER DISTRICT.** By J. W. Gregory. *T. A. I. M. E.*, vol. 10, p. 165. 14 pages. I.
- DUCKTOWN COPPER DEPOSIT, TENNESSEE.** By J. W. Gregory. *T. A. I. M. E.*, vol. 10, p. 182. 3½ pages.
- COPPER REGION OF TENNESSEE. A Sketch of the Geology of Tennessee.** By R. O. Currey. *Min. Mag.*, vol. 8, p. 156. 7 pages.
- COPPER IN TURKEY.** *Min. & Sci. Press*, vol. 98, p. 824. 1 column.
- THE COPPER VEINS OF THE SOUTH.** By O. M. Lieber. *Min. Mag.*, vol. 7, p. 367. 4 pages.
- COPPER DEPOSITS IN THE WESTERN FOOTHILLS OF THE SIERRA NEVADA.** By W. Forestner. *Min. & Sci. Press*, vol. 96, p. 743. 10½ columns. I.
- THE UTAH COPPER MINE.** By C. De Kalb. *Min. & Sci. Press*, vol. 98, p. 516. 9½ columns. I.
- OPERATIONS OF THE UTAH COPPER COMPANY DURING 1908.** By D. C. Jackling. *E. & M. J.*, vol. 87, p. 1185. 11½ columns. I.
- THE SOUTH UTAH MINE AND MILL.** By L. Palmer. *M. & M.*, vol. 31, p. 592. 8½ columns. I.
- THE BOSTON CONSOLIDATED MINING COMPANY, UTAH.** *E. & M. J.*, vol. 85, p. 257. 3 columns.

- BOSTON CONSOLIDATED, BINGHAM, UTAH.** By C De Kalb. Min. & Sci. Press, vol. 98, p. 553. 7 columns. I.
- ORE OCCURRENCE AT FORTUNA MINE, BINGHAM, UTAH.** By E R. Zahnski. E. & M. J., vol. 86, p 1191. 14 columns. I
- CHARACTER OF THE CUBAN COPPER MINES.** J. C. M I, vol. 13, p. 97 2½ pages.
- "TWO CUBAN MINES".** Copper. By B. B. Lawrence. J. C. M I., vol. 13, p. 91. 18 pages. I.
- EL COBRE COPPER MINE.** By B. B. Lawrence M. & M, vol 31, p 235. 10½ columns. I.
- EL COBRE MINES, CUBA** By E. G. Tuttle M. & M, vol 31, p. 449. 11 columns. I.
- COPPER ORES IN PORTO RICO.** E. & M. J, vol. 88, p 518. ½ column
- A SKETCH OF THE MINES AND COPPER REGION OF SOUTHWESTERN VIRGINIA.** By W. J. Marsh Min. Mag, vol 9, p. 217. 3½ pages.
- COPPER IN SOUTHWESTERN WISCONSIN.** By G. H Cox Min. & Sci. Press, vol. 99, p 592. 1½ columns. I.
- COPPER DEPOSITS OF THE HARTVILLE UPLIFT, WYOMING** By S H Ball. U. S G. S, Bull. 315, p. 93 14 pages. 1906
- LAKE CREEK, WYOMING, A NEW MINING DISTRICT.** By W. Benton. E. & M. J, vol. 86, p 36. 1 column.
- See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.**
- See also **THE COPPER TRADE**
- Occurrence of Diamonds**
- DIAMOND-CARBON IN METEORITES.** Min. & Sci. Press, vol. 95, p. 310. ½ columns.
- CARBONS: The Black Diamond.** By J. Baszanger. Min. & Sci. Press, vol. 95, p. 788 ½ column.
- THE DIAMOND INDUSTRY IN SOUTH AFRICA.** E. & M. J., vol. 85, p. 1106. ½ column.
- SOUTH AFRICAN DIAMOND MINES.** E & M J, vol. 87, p. 1240. 1½ columns.
- DIAMOND MINING AT DE BEERS** P. C. M. & M. Soc S. A, vol 7, p 227. 4½ columns.
- THE ERUPTIVE DIAMOND-BEARING BRECCIAS OF THE BOSHOFF DISTRICT, SOUTH AFRICA.** By J. P. Johnson. T. I. M. & M, vol 17, p. 277. 8 pages
- VISIT TO PREMIER DIAMOND MINE.** P. C. M. & M Soc S. A., vol. 9, p. 209. 5½ columns I.
- PREMIER DIAMOND MINE, NEAR PRETORIA, TRANSVAAL** By E M. Weston. E & M J, vol. 89, p. 369. 10½ columns. I.
- DIAMOND MINES AND ALLUVIAL DEPOSITS, SOUTH AFRICA: The Method Employed in Winning Diamonds on the Vaal River Alluvial Fields.** By P R. Day. T. Au. I. M. E., vol. 6, p. 87. 6 pages. I.
- ALLUVIAL DIAMOND MINING, SOUTH AFRICA.** By P. B. Holte M. & M, vol. 29, p. 37. 2 columns. I.
- DIAMONDS IN ARKANSAS.** By G. F. Kunz and H. S. Washington T. A. I. M. E., vol. 39, p. 169. 7 pages.
- SOME FACTS AND CORRECTIONS REGARDING THE DIAMOND REGION OF ARKANSAS.** By J. C Branner E. & M J, vol. 87, p. 371. 4 columns.
- PRODUCTION OF DIAMONDS FROM THE ARKANSAS FIELD.** E. & M. J., vol. 87, p. 155. 1½ columns.
- THE ARKANSAS DIAMOND FIELDS.** By O Q. Miller. Min. & Sci. Press, vol. 99, p. 534. 1½ columns.
- THE ARKANSAS DIAMOND FIELDS IN 1909** By J. F. Fuller E & M J, vol. 89, p. 767. 4 columns. I.
- DIAMOND MINES OF ARKANSAS** By J. L. Cowan. Min. & Sci Press, vol. 101, p. 178. 4 columns I
- DIAMOND MINE IN PIKE COUNTY, ARKANSAS.** By J. T. Fuller. E & M. J., vol. 87, p. 152. 10½ columns. I.

SPECULATION ON THE ORIGIN AND FORMATION OF THE DIAMOND, WITH ESPECIAL REFERENCE TO ITS FORMATION AND POSITION AT BINGARA, NEW SOUTH WALES. By T. Mercer. T. Au. I. M. E., vol 3, p 56. 14½ pages.

DOES AN AUSTRALIAN KIMBERLEY EXIST? By J Plummer. Min & Sci. Press, vol. 99, p 93. 2½ columns.

PROSPECTING FOR "BLACK DIAMONDS" By A. S. Atkinson. M. & M., vol. 30, p. 644. 2½ columns

MINERAL RESOURCES OF THE BAHIA HIGHLANDS, BRAZIL. E. & M. J., vol 87, p. 1029. 12½ columns. I.

BRAZILIAN DIAMONDS. Min. & Sci. Press, vol. 95, p. 24. 1 column.

OCCURRENCE OF THE DIAMONDS OF BAHIA, BRAZIL E. & M. J., vol 87, p. 984. 5 columns. I.

THE DIAMOND BEARING HIGHLANDS OF BAHIA, BRAZIL By J. C. Branner. E. & M. J., vol. 87, p. 981, 17½ columns, I; p. 1029, 12½ columns, I.

BRAZILIAN DIAMOND MINING E & M. J., vol. 85, p. 442 1 column

THE DIAMANTINA DISTRICT OF MINAS GERAES. By G. W. Lindsay. E & M. J, vol. 87, p. 856. 2 columns

MINING FOR GEMS IN BRAZIL. By A. S. Atkinson. E. & M. J., vol. 87, p. 1234. 5 columns

DIAMONDS IN CALIFORNIA. By H. G. Hanks. Min & Sci. Press, vol 20, p. 162, 2½ columns; p. 194, 1 column; vol. 22, p. 140, 1½ columns.

SEARCH FOR DIAMONDS ON THE PACIFIC COAST. Min. & Sci. Press, vol. 22, p. 358. 1 column.

See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.**

Diatomaceous Earths

GERMAN DIATOMACEOUS EARTH. E. & M. J., vol. 87, p. 938. ¾ column.

DIATOMACEOUS DEPOSITS OF NORTHERN SANTA BARBARA COUNTY, CALI-

FORNIA. By R. Arnold and R. Anderson. U S G S, Bull 315, p. 438 10 pages. 1906.

Fuller's Earth Deposits

PROPERTIES AND TESTS OF FULLER'S EARTH By J T. Porter. U. S. G. S, Bull 315, p 268. 22½ pages. 1906.

FULLER'S EARTH P. C. M. & M. Soc. S A, vol 9, p. 276. 1½ columns.

FULLER'S EARTH. M. & M., vol. 29, p. 54. 1½ columns. I

FULLER'S EARTH. E & M. J., vol. 87, p. 1000. 2 columns.

FULLER'S EARTH, KAOLIN AND PEAT IN FLORIDA. By E. H. Sellards. E. & M. J, vol. 85, p. 1187 1 column.

FULLER'S EARTH OF SOUTHWESTERN GEORGIA AND WESTERN FLORIDA. By T. W. Vaughan. U. S. G. S., Mineral Resources, 1901. 13 pages.

Occurrence of Feldspar

ECONOMIC GEOLOGY OF THE FELDSPAR DEPOSITS OF THE UNITED STATES. By E. S. Bastin. U. S G. S., Bull. 420. 85 pages. I. 1910.

FELDSPAR AND QUARTZ DEPOSITS OF MAINE By E. S. Bastin. U. S. G. S, Bull. 315, p. 383. 10½ pages. 1906.

Occurrence of Fluorspar

FLUORSFAR GRADES AND MARKETS. By F. J. Fohs. Min. & Sci Press, vol. 99, p 720. 3½ columns.

FLUORSFAR. By F J. Fohs Min. & Sci. Press, vol 98, p. 888. 5 columns.

FLUORSFAR IN COLORADO. By E. F. Burchard. Min. & Sci Press, vol. 99, p. 258. 6½ columns. Map.

KENTUCKY FLUORSFAR AND ITS VALUE TO THE IRON AND STEEL INDUSTRIES. By F. J. Fohs. T. A. I. M. E., vol. 40, p. 261. 13 pages.

Occurrence of Glass Sands

NOTES ON VARIOUS GLASS SANDS, MAINLY UNDEVELOPED By E. F. Burchard. U. S. G. S., Bull 315, p 377 6 pages. 1906

THE REQUIREMENTS OF SAND AND LIMESTONE FOR GLASS MAKING By E. F. Burchard. U. S. G. S., Bull 285, p 452 7 pages. 1905

GLASS-SAND INDUSTRY OF INDIANA, KENTUCKY, AND OHIO By E. F. Burchard. U. S. G. S., Bull. 315, p. 361. 16 pages. 1906.

GLASS SAND OF THE MIDDLE MISSISSIPPI BASIN. By E. F. Burchard. U. S. G. S., Bull 285, p 459. 14 pages. 1905.

THE GLASS-SAND INDUSTRY IN EASTERN WEST VIRGINIA By G. W. Stose. U. S. G. S., Bull 285, p. 473. 3 pages. 1905

See also GLASS MAKING.

The Occurrence of Gold

THE PRESENCE OF GOLD AND SILVER IN DEEP-SEA DREDGINGS. T. A. I. M. E., vol 38, p 704. 1 page

THE GREAT GOLD MINES By T. A. Rickard. Min & Sci Press, vol 96, p. 10, 7½ columns, I; p. 161, 5½ columns, I.

LODES AND QUARTZ VEINS OF GOLD. By A. Waddington. Min. Mag, vol. 2, p 21. 3 pages.

THE ANATOPUR GOLDFIELD. Min. Mag, London, vol 2, p 42. 1½ columns. I.

SOME NOTES ON BANKET DEPOSITS, WITH SPECIAL REFERENCE TO THOSE MET WITH AT THE DENNY-DALTON GOLDFIELDS, VRYHIED DISTRICT, SOUTH AFRICAN REPUBLIC, AND THE PROCESS OF TREATMENT EMPLOYED THERE. By G. A. Denny T. Au. I. M. E., vol. 3, p. 75. 16 pages. I.

THE CROWN MINES, LIMITED. M. & M., vol. 31, p. 691. 2½ columns.

CONSOLIDATED GOLD FIELDS OF SOUTH AFRICA, LTD. By E. M. Weston.

E. & M. J., vol. 85, p 355 3½ columns I.

THE ROBINSON MINE, SOUTH AFRICA. By J. B. Pritchford. Min. & Sci. Press, vol. 97, p 606. 5 columns

PRESENT MINING CONDITIONS ON THE RAND: Discussion of the paper of Thomas H. Leggett, p 211 T. A. I. M. E., vol 39, p. 856. 2½ pages.

NOTES ON RAND MINING By T. Johnson. P. C. M. & M. Soc. S. A., vol 8, p 255, 23 columns, I, p. 305, 1 column, p 346, 12½ columns, p. 381, 3 columns; vol 9, p. 13, 15 columns, I; p. 48, 1 column; p. 82, 24 columns, I.

THE GREAT MINES OF THE RAND. By T. A. Rickard. Min. Mag, London, vol 2, p 213. 7½ columns. I.

PRESENT MINING CONDITIONS ON THE RAND By T. H. Leggett. T. A. I. M. E., vol 39, p 211 12½ pages.

REMINISCENCES OF THE EARLY RAND. By M. H. Coombe P. C. M. & M. Soc. S. A., vol 9, p 38, 7½ columns; p 123, 5 columns, p 204, 4 columns; p 227, 10 columns, I; p. 272, 5 columns

PRESENT MINING CONDITIONS ON THE RAND. By T. H. Leggett. E. & M. J., vol. 85, p. 1239. 10 columns

FURTHER NOTES ON RAND MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 10, p. 276, 11½ columns, I; p 319, 1½ columns; p. 449, 6 columns; p. 394, 8½ columns, I

REMINISCENCES OF THE EARLY RAND. By J. S. MacArthur E. & M. J., vol. 88, p. 357 4½ columns.

MINING CONDITIONS ON THE RAND. By T. H. Leggett. Min. & Sci. Press, vol. 96, p. 812. 9½ columns. I.

THE PRINCIPAL MINES OF THE TRANSVAAL. Min. & Sci. Press, vol 96, p. 10 2 columns. Table.

- THE PILGRIM'S REST GOLD FIELDS AND MINING METHODS.** By J. Moyle-Phillips. P. C. M. & M. Soc. S. A., vol. 9, p. 293, 16 columns, I.; p. 349, 3½ columns; p. 395, 2 columns, I.
- VISITING THE GOLD COAST, WEST AFRICA.** By F. F. Sharpless. Min. & Sci. Press, vol. 101, p. 800. 7 columns. Map
- A WEST AFRICAN GOLD MINE.** E. & M. J., vol. 87, p. 1005. 1½ columns.
- THE WEST AFRICAN, GOLDFIELD.** E. & M. J., vol. 87, p. 905. 1 column.
- WEST AFRICA, THE GOLD COAST COLONY, AND ASHANTI IN 1908.** By W. F. Wilkinson. E. & M. J., vol. 87, p. 196. 3½ columns.
- EARLY DAYS ON THE GOLD COAST.** By E. T. McCarthy. Min. Mag., London, vol. 1, p. 291. 6½ columns.
- WEST AFRICAN MINES.** By J. H. Curle. Min. Mag., London, vol. 1, p. 42. 6 columns. I.
- GOLD MINING IN WEST AFRICA.** E. & M. J., vol. 85, p. 1282. 1 column.
- THE BARBERTON GOLDFIELD IN SWAZILAND.** E. & M. J., vol. 89, p. 669. 2½ columns.
- THE BARBERTON GOLDFIELD, SOUTH AFRICA.** By A. Richardson. P. C. M. & M. Soc. S. A., vol. 10, p. 122. 25 columns.
- NOTES ON THE GOLD OF THE ROODEPOORT DISTRICT.** By G. Andreoli. P. C. M. & M. Soc. S. A., vol. 5, p. 73, 4 columns; p. 152, 1 column.
- MINING IN SOUTHERN RHODESIA.** By A. H. Ackermann. Min. Mag., London, vol. 2, p. 138. 6 columns. I.
- SMALL MINES OF RHODESIA.** By B. I. Collings. P. C. M. & M. Soc. S. A., vol. 9, p. 76, 10 columns; p. 126, 3½ columns; p. 166, 2½ columns; p. 206, 2 columns; p. 275, 1½ columns.
- STAR OF THE CONGO MINE.** Min. & Sci. Press, vol. 100, p. 260. ½ column. I.
- MINING CONDITIONS IN THE BELGIAN CONGO (CONGO FREE STATE).** By S. H. Ball and M. K. Shaler. T. A. I. M. E., vol. 41, p. 189. 9 pages. I.
- THE NEW GOCH GOLD MINES, LTD.** P. C. M. & M. Soc. S. A., vol. 5, p. 57. 10 columns.
- NOTES ON SOME GOLD DEPOSITS OF ALABAMA.** By H. D. McCaskey. U. S. G. S., Bull. 340, p. 36. 17 pages. 1907
- SOME ECONOMIC GOLD DEPOSITS OF ALASKA.** By F. C. Lincoln. E. & M. J., vol. 90, p. 551. 11 columns.
- GOLD MINING IN ALASKA.** By A. H. Brooks. E. & M. J., vol. 85, p. 311. 3 columns.
- AURIFEROUS QUARTZ VEINS IN THE FAIRBANKS DISTRICT, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 442, p. 210. 20 pages. I. 1909.
- AURIFEROUS QUARTZ VEINS ON UNALASKA ISLAND.** By A. J. Collier. U. S. G. S., Bull. 259, p. 102. 2 pages.
- GOLD DEPOSITS OF THE SHUMAGIN ISLANDS.** By G. C. Martin. U. S. G. S., Bull. 259, p. 100. 2 pages.
- OCCURRENCE OF GOLD IN TREADWELL ORE DEPOSITS.** U. S. G. S., Bull. 259, p. 82. ½ page.
- THE ALASKA-TREADWELL MINES.** Min. Mag., London, vol. 2, p. 142, 2 columns, I.; vol. 3, p. 278, 4 columns, I.
- THE TREADWELL ORE DEPOSITS.** Min. & Sci. Press, vol. 95, p. 117. 6½ columns. I.
- THE TREADWELL GROUP OF MINES.** By A. C. Spencer. Min. & Sci. Press, vol. 95, p. 117. 6½ columns. I.
- THE JUNEAU GOLD BELT, ALASKA.** By A. C. Spencer. U. S. G. S., Bull. 287. 161 pages. I. 1906.
- LODE MINING IN SOUTHEASTERN ALASKA, 1907.** By C. W. Wright. U. S. G. S., Bull. 345, p. 78. 20 pages. I. 1907.

- LODE MINING IN SOUTHEASTERN ALASKA.** By C. W. Wright. U. S. G. S., Bull. 314, p. 47. 28 pages. I. 1906.
- YAKUTAT BAY REGION** Min. & Sci. Press, vol. 99, p. 719. 1 column.
- MINING ON PRINCE OF WALES ISLAND, ALASKA.** By W. A. Scott. Min & Sci. Press, vol. 98, p. 885 3½ columns. I.
- MINING AT SHUNGNAK, ALASKA** By L. Lloyd. Min. & Sci. Press, vol. 101, p. 109. 2 columns. I.
- THE KOYNKUK-CHANDLAR GOLD REGION, ALASKA.** By A. G. Maddren. U. S. G. S., Bull. 442, p. 284 32 pages I. 1909.
- GOLD OF PRINCE WILLIAM SOUND.** By U. S. Grant. U. S. G. S., Bull. 379, p. 97. 1 page. 1908.
- GOLD FIELDS OF THE SOLOMON AND NINKLUK RIVER BASINS.** By P. S. Smith. U. S. G. S., Bull. 314, p. 146. 11 pages. 1906.
- OCCURRENCE OF GOLD IN THE YUKON-TANANA REGION, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 345, p. 179. 10 pages. I. 1907.
- PLACER GOLD DEPOSITS OF ALASKA** E. & M. J., vol. 90, p. 551. 6 columns
- NEW PLACERS IN ALASKA.** Min. & Sci. Press, vol. 97, p. 842. 2 columns. Map.
- RAMPART PLACER REGION.** By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 259, p. 104. 15 pages.
- THE RAMPART PLACERS, YUKON-TANANA REGION, ALASKA.** By F. L. Hess. U. S. G. S., Bull. 337. 102 pages. I. 1908.
- THE RAMPART GOLD PLACER REGION ALASKA.** By L. M. Prindle and F. L. Hess. U. S. G. S., Bull. 280. 54 pages. I. 1906.
- THE GOLD PLACERS OF THE FORTY-MILE, BIRCH CREEK, AND FAIRBANKS REGIONS, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 251. 89 pages. I. 1905.
- THE FORTY-MILE GOLD-PLACER DISTRICT, ALASKA.** By L. M. Prindle. U. S. G. S., Bull. 345, p. 187. 12 pages. 1907
- THE INNOKO GOLD-PLACER DISTRICT, ALASKA, WITH ACCOUNTS OF THE CENTRAL KUSKOKWIN VALLEY AND THE RUBY CREEK AND GOLD HILL PLACERS.** By A. G. Maddren. U. S. G. S., Bull. 410. 87 pages. I. 1910.
- GOLD PLACERS OF THE INNOKO DISTRICT.** By A. G. Maddren. U. S. G. S., Bull. 379, p. 238 29 pages. 1908.
- PRELIMINARY REPORT ON THE CAPE NOME GOLD REGION, ALASKA** By F. C. Schrader, and A. H. Brooks. U. S. G. S., Special Publications, 1900. 56 pages. I.
- THE NOME REGION, ALASKA.** By F. H. Moffitt. U. S. G. S., Bull. 314, p. 126. 18 pages. I. 1906.
- THE GOLD PLACERS OF TURNAGAIN ARM.** By F. H. Moffitt. U. S. G. S., Bull. 259, p. 90. 9 pages I.
- THE CAPE YAKTAZ PLACERS** By G. C. Martin. U. S. G. S., Bull. 259, p. 88. 2 pages.
- THE IRON CREEK REGION.** By P. S. Smith. U. S. G. S., Bull. 379, p. 302. 53 pages. I. 1908.
- PLACERS OF THE GOLD HILL DISTRICT.** By A. G. Maddren. U. S. G. S., Bull. 379, p. 234. 3 pages. 1908.
- GOLD PLACERS OF THE RUBY CREEK DISTRICT.** By A. G. Maddren. U. S. G. S., Bull. 379, p. 229. 5 pages. I. 1908.
- THE GOLD PLACERS OF PARTS OF SEWARD PENINSULA, ALASKA, INCLUDING THE NOME, COUNCIL, KOUGAROK, PORT CLARENCE, AND GOODHOPE PRECINCTS.** By A. J. Collier. U. S. G. S., Bull. 328. 343 pages. I. 1908.
- THE FAIRBANKS GOLD PLACER REGION.** By L. M. Prindle and F. J. Katz. U. S. G. S., Bull. 379, p. 181. 20 pages. I. 1908.

- YUKON GOLD. By O. B. Perry. Min. & Sci. Press, vol. 96, p. 556. 3 columns.
- THE PORCUPINE PLACER DISTRICT, ALASKA. By C. W. Wright. U. S. G. S., Bull. 236. 35 pages. I. 1904.
- THE FAIRHAVEN GOLD PLACERS OF THE SEWARD PENINSULA, ALASKA. By F. H. Moffit. U. S. G. S., Bull. 247. 85 pages. I. 1905.
- GOLD PLACERS OF THE MULCHATNA, ALASKA. By F. J. Katz. U. S. G. S., Bull. 442, p. 201. 1½ pages. 1909.
- PELLEY, ROSS AND GRAVEL RIVERS. By J. Keele. Min. & Sci. Press, vol. 99, p. 66. 2 columns.
- HAINES DISTRICT, ALASKA. By W. A. Scott. Min. & Sci. Press, vol. 99, p. 198. 2½ columns. I.
- PLACERS OF TIERRA DEL FUEGO. By S. H. Loram. Min. & Sci. Press, vol. 99, p. 125. 6½ columns.
- THE OCTAVE MINE, ARIZONA. By J. E. Russell. E. & M. J., vol. 85, p. 211. 1½ columns. I.
- THE GOLD ROAD MINE, ARIZONA. By J. C. Kennedy. Min. & Sci. Press, vol. 101, p. 773. 1½ columns.
- NOTES ON THE PLACER DEPOSITS OF GREATERVILLE, ARIZONA. By J. M. Hill. U. S. G. S., Bull. 430, p. 11. 12 pages. I. 1909.
- THE MOUNT MORGAN GOLD AND COPPER MINE. By G. W. Williams. E. & M. J., vol. 87, p. 635. 12½ columns. I.
- OCCURRENCE OF ORE IN MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 747. 1 column.
- THE MOUNT MORGAN MINE, CENTRAL QUEENSLAND. By J. B. Wilson. E. & M. J., vol. 87, p. 746. 19 columns. I.
- NATURE OF THE MOUNT MORGAN ORE DEPOSITS. E. & M. J., vol. 87, p. 635. 1½ columns.
- THE MOUNT MORGAN MINE. By O. M. Colvocoresses. M. & M., vol. 29, p. 3. 4½ columns. I.
- THE MOUNT MORGAN MINE. Min. & Sci. Press, vol. 95, p. 524. 3 columns. I.
- TELLURIUM IN THE ORES OF THE HAURAKI GOLDFIELDS, NEW ZEALAND. By F. B. Allen. T. Au. I. M. E., vol. 7, p. 94. 4 pages.
- THE SYNCLINAL OR "INVERTED SADDLE" REEFS OF THE BENDIGO GOLDFIELD. By W. H. Cundy. T. Au. I. M. E., vol. 8, pt. 2, p. 278. 10 pages. I.
- NOTES ON THE LEFROY GOLDFIELDS. By L. Jolly. T. Au. I. M. E., vol. 4, p. 132. 6 pages.
- MINING ON PRIVATE PROPERTY ON THE GOLDFIELDS OF WESTERN AUSTRALIA. By E. Ladghey. T. Au. I. M. E., vol. 8, pt. 1, p. 1. 10 pages. I.
- THE GOLD FIELDS OF VICTORIA. Min. & Sci. Press, vol. 20, p. 120, 1 column; p. 130, 1½ columns; p. 234, 2 columns, p. 266, 1 column.
- NOTES ON THE GEOLOGY, QUARTZ REEFS AND MINERALS OF THE WAIHI GOLDFIELD, NEW SOUTH WALES, AUSTRALIA. By P. C. Morgan. T. Au. I. M. E., vol. 8, pt. 2, p. 164. 23½ pages. I.
- GOLD IN SALT LAKES IN WESTERN AUSTRALIA. T. Au. I. M. E., vol. 8, pt. 1, p. 32. 1 page.
- NOTES ON THE AURIFEROUS DEVONIAN FORMATIONS OF GIPPSLAND, VICTORIA. By H. Herman. T. Au. I. M. E., vol. 5, p. 157. 12 pages. Maps.
- A FEW NOTES AND OBSERVATIONS ON THE REDUCTION AND ORE-DRESSING OF AURIFEROUS QUARTZ VEINSTONE IN VICTORIA. By H. Rosales. T. Au. I. M. E., vol. 5, p. 81. 12 pages. Tables.
- AURIFEROUS VEINS AT CHARTERS TOWERS, AUSTRALIA. By W. J. Paull. T. Au. I. M. E., vol. 3, p. 243. 6 pages.

- SOME GOLD-BEARING ROCKS AT BINGARA, NEW SOUTH WALES.** By C. H. Mole. T. Au I M E, vol 2, p 114 2½ pages
- PHYSIOGRAPHY AND GEOLOGY OF THE WADNAMINGA GOLDFIELDS, SOUTH AUSTRALIA.** By F. D Johnson. T. Au I M E, vol. 2, p. 58. 10 pages. I.
- GOLD DEPOSITS OF COTHY, SOUTH WALES** By B. W. Holman. Min. Mag., vol. 4, p. 374. 8½ columns. I.
- LEADING PRODUCERS OF KALGOORLIE, WEST AUSTRALIA.** By G. W. Williams E. & M. J., vol 85, p 403. 3½ columns.
- IMPRESSIONS OF THE COUNTRY BETWEEN COOLGARDI AND McDONNELL RANGES.** By H. V. Smith. T Au I. M E, vol. 8, pt. 1, p. 68. 4½ pages.
- THE DISCOVERY AND OCCURRENCE OF TELLURIDE OF GOLD UPON THE KALGOORLIE GOLDFIELDS, EAST COOLGARDI DISTRICT, WESTERN AUSTRALIA** By A G. Holroyd T. Au. I M E, vol. 4, p. 186. 8 pages.
- ALLUVIAL DEPOSITS IN WESTERN AUSTRALIA** T. Au. I. M. E, vol 13, p. 182 2 pages.
- DEEP LEAD MINING IN AUSTRALIA.** By D. H. Browne. Min. & Sci. Press, vol. 97, p. 565. 9½ columns. I.
- DEEP LEADS OF VICTORIA: The Cainozoic Buried Auriferous River Deposits.** By H. L. Wilkinson. T. I. M & M., vol. 17, p. 210. 58 pages. I.
- GOLD NUGGETS OF VICTORIA.** T. Au. I. M E, vol. 2, p. 23. 1 page.
- THE BOICZA GOLD MINES IN HUNGARY.** By N B. Knox. Min. & Sci. Press, vol. 100, p. 31. 8 columns I.
- THE GOLD ALLUVIALS OF THE RIVER DRAU IN HUNGARY.** By A. Von Gernet. T. I. M. & M., vol. 17, p. 439. 4 pages.
- THE VERESPATAK-ABRUDBANYA (GOLD) DISTRICT, HUNGARY** By G. Slujka. E & M. J., vol 85, p 154. 1½ columns
- GOLD DEPOSITS IN BOLIVIA.** M & M, vol. 30, p. 379. 1 column. Map.
- THROUGH THE BOLIVIAN HIGHLANDS.** By E P. Mathewson. Min. & Sci. Press, vol. 97, p. 227, 4 columns; p. 263, 8½ columns, I.
- SUCHEZ DE BOLIVIA HYDRAULIC MINE** By W. E. G. Firebrace Min & Sci Press, vol. 98, p. 287. 3 columns I.
- AURIFEROUS ALLUVIALS OF THE UPPER AMAZON VALLEY.** By Sir W M Conway. E. & M. J., vol. 87, p. 496. 2 columns.
- THE CENTRE STAR GROUP OF MINES, ROSSLAND, BRITISH COLUMBIA.** By R. H. Allen E. & M. J., vol 89, p. 17. 8½ columns. I.
- LE ROI MINE AT ROSSLAND, BRITISH COLUMBIA.** By R. H. Allen. E & M. J, vol. 89, p. 220. 4 columns. I.
- BEAR RIVER DISTRICT, BRITISH COLUMBIA.** By W W. Rush. Min & Sci Press, vol. 99, p. 152 2 columns. Map
- THE PORTLAND CANAL MINING DISTRICT, BRITISH COLUMBIA.** E. & M. J, vol. 90, p. 451 3 columns. I.
- CALIFORNIA GOLD MINING.** Min. & Sci Press, vol. 100, p 17. 3 columns. I.
- MINERAL PROSPECTS AROUND DEATH VALLEY.** By R. E. Rinehart. Min. & Sci. Press, vol. 97, p. 297. 4½ columns. I.
- MINERAL DISTRICT OF CENTRAL CALIFORNIA** By J. B. Trask. Min. Mag., vol. 3, p. 121, 15 pages; p 239, 12 pages.
- MINES AND MINING IN CALIFORNIA: Placer Mining.** Min. Mag., vol. 5, p. 193. 23 pages.
- QUARTZ MINING OPERATIONS IN CALIFORNIA** Min. Mag., vol. 1, p. 144. 5½ pages.

- EXPERIENCE OF THE GOLD MINES OF CALIFORNIA.** Min. Mag., vol. 8, p. 28, 12 pages; p. 129, 8½ pages; p. 222, 6 pages; p. 477, 10 pages.
- THE NEW GOLD FIELD IN SAN DIEGO COUNTY, CALIFORNIA.** Min. & Sci. Press, vol. 20, p. 200. 1 column.
- MINING ON THE MOTHER LODE IN AMADOR COUNTY, CALIFORNIA.** By W. H. Storms. Min. & Sci. Press, vol. 100, p. 897. 6 columns.
- THE EXPOSED TREASURE LODE, MOJAVE, CALIFORNIA.** By C. De Kalb. T. A. I. M. E., vol. 38, p. 310. 10 pages. I.
- THE STANDARD MINE, BODIE, CALIFORNIA.** By R. G. Brown. T. A. I. M. E., vol. 38, p. 343. 15 pages. I.
- OBSERVATIONS ON THE EXTENT OF THE GOLD REGION OF CALIFORNIA AND OREGON.** By W. P. Blake. Min. Mag., vol. 5, p. 32. 14 pages.
- HART: A New California Gold Camp.** E. & M. J., vol. 85, p. 308. ½ column.
- GOLD PARK DISTRICT, CALIFORNIA.** E. & M. J., vol. 90, p. 600. 2 columns. I.
- BLACK DIAMOND, CALIFORNIA.** By O. H. Hershey. Min. & Sci. Press, vol. 98, p. 147. 1½ columns.
- GOLD MINING IN RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. Min. & Sci. Press, vol. 101, p. 508. 4 columns; p. 533, 8 columns, I.
- GOLD MINING IN THE RANDSBURG QUADRANGLE, CALIFORNIA.** By F. L. Hess. U. S. G. S., Bull. 430, p. 23. 24 pages. 1909.
- HOAG DISTRICT, CALIFORNIA.** By N. C. Stines. Min. & Sci. Press, vol. 100, p. 384. 5½ columns. I.
- KEYSTONE CONSOLIDATED MINE AND ITS EARLY HISTORY.** By W. H. Storms. Min. & Sci. Press, vol. 100, p. 755. 4 columns. I.
- MINING AT GRASS VALLEY AND NEVADA CITY.** By G. E. Walcott. E. & M. J., vol. 87, p. 396. 6½ columns. I.
- MINING AT ALLEGHANY, CALIFORNIA.** By F. L. Lowell. Min. & Sci. Press, vol. 100, p. 132. 3 columns. I.
- SOME ORE DEPOSITS IN THE INYO RANGE, CALIFORNIA.** By J. A. Reid. Min. & Sci. Press, vol. 95, p. 80. 4½ columns. I.
- GOLD MINES NEAR THE CALAVERAS BIG TREES.** Min. & Sci. Press, vol. 22, p. 361. 1 column.
- THE WEAVERVILLE-TRINITY CENTER GOLD GRAVELS, TRINITY COUNTY, CALIFORNIA.** By D. F. MacDonald. U. S. G. S., Bull. 430, p. 48. 11 pages. I. 1909.
- SANTA CLARA RIVER PLACERS** By C. E. Jamison. Min. & Sci. Press, vol. 100, p. 360. 2½ columns.
- LA GRANGE HYDRAULIC MINE, CALIFORNIA.** By D. F. Campbell. Min. & Sci. Press, vol. 97, p. 491. 6 columns. I.
- GOLD AREAS IN THE CANADIAN NORTHWEST.** E. & M. J., vol. 90, p. 548. 4 columns.
- GOLD IN THE EASTERN TOWNSHIPS OF THE PROVINCE OF QUEBEC.** By J. Obalski. J. C. M. I., vol. 11, p. 251. 6 pages. I. Map.
- THE LARDER LAKE DISTRICT, ONTARIO.** E. & M. J., vol. 85, p. 258. 2 columns.
- THE NICKEL PLATE MINE AND MILL.** Min. & Sci. Press, vol. 101, p. 271. 4 columns. I.
- RECENT MINING DEVELOPMENTS ON THE SKEENA RIVER, CANADA.** By W. W. Leach. J. C. M. I., vol. 13, p. 357. 6 pages.
- THE OPASATKA LAKE DISTRICT, PROVINCE OF QUEBEC.** By F. Cirkel. E. & M. J., vol. 87, p. 455. 3 columns. I.
- THE NEW GOLDFIELDS OF PORCUPINE, ONTARIO.** By R. E. Hore. E. & M. J., vol. 90, p. 1296. 3½ columns. I.

- THE PORCUPINE DISTRICT, ONTARIO. By R. W. Brock. E. & M. J., vol. 90, p. 221. 3 columns.
- THE PORCUPINE GOLDFIELD. By A. L. SIMON. Min. Mag., London, vol. 3, p. 348. 6 columns. I.
- PORCUPINE, THE NEW GOLD REGION OF THE FAR NORTH. Min. & Sci. Press, vol. 101, p. 705. 3½ columns.
- PORCUPINE DISTRICT OF ONTARIO. By W. G. Miller. Min. & Sci. Press, vol. 101, p. 232. 2 columns. Map.
- PORCUPINE LAKE REGION, ONTARIO. E. & M. J., vol. 89, p. 209. 3½ columns. Map.
- THE PORCUPINE GOLDFIELD. By W. J. Loring. Min. Mag., vol. 4, p. 284. 8 columns. I.
- THE PORCUPINE GOLD FIELD. By R. A. Meyer. M. & M., vol. 31, p. 701. 4½ columns. Map.
- A BRIEF DESCRIPTION OF THE GOWGANDA SILVER DISTRICT IN ONTARIO, CANADA. By P. R. Iremán. Sch. Mines Quart., vol. 31, p. 172. 4½ pages. I.
- FIRST YEAR OF THE GOWGANDA DISTRICT, ONTARIO. By G. M. Colvocoresses. E. & M. J., vol. 89, p. 1218. 9½ columns. I.
- THE GOWGANDA REGION IN ONTARIO. E. & M. J., vol. 88, p. 60. 5 columns.
- IMPRESSIONS OF A NEW CAMP: GOWGANDA. By H. E. West. E. & M. J., vol. 87, p. 900. 7 columns.
- NOTES ON THE RAINY RIVER DISTRICT, ONTARIO. By W. L. Fleming. E. & M. J., vol. 88, p. 1064. 6½ columns. I.
- THE EASTERN CANADIAN MINERAL BELT. By T. F. Van Wagenen. Min. & Sci. Press, vol. 101, p. 372. 5½ columns. Map.
- MONTREAL RIVER DISTRICT, CANADA. By W. H. Collins. Min. & Sci. Press, vol. 98, p. 895. 2 columns.
- THE PROGRESS OF GOLD MINING IN NORTH CAROLINA. By E. W. Lyon. E. & M. J., vol. 87, p. 293. 13½ columns. I.
- ORE DEPOSITS OF THE EASTERN GOLDBELT OF NORTH CAROLINA. By W. O. Crosby. T. A. I. M. E., vol. 38, p. 849. 9 pages.
- NOTES ON THE GOLD REGIONS OF NORTH AND SOUTH CAROLINA. By S. P. Leeds. Min. Mag., vol. 2, p. 27, 6 pages; p. 357, 12 pages, I.
- MINES AND MILL OF MONTEZUMA MINES, COSTA RICA. By S. F. Shaw. E. & M. J., vol. 90, p. 715. 6 columns. I.
- GOLD REGION OF THE STRAIT OF MAGELLAN. By R. A. T. Penrose. Min. & Sci. Press, vol. 98, p. 153. 3½ columns.
- THE GOLD DEPOSITS OF FRENCH GUIANA. E. & M. J., vol. 87, p. 400. 2½ columns. I.
- THE GOLD-FIELDS OF FRENCH GUIANA AND THE NEW METHOD OF DREDGING. By A. F. J. Bordeaux. T. A. I. M. E., vol. 41, p. 567. 28 pages. I.
- GOLD-BEARING GRAVELS IN FRENCH GUIANA. T. A. I. M. E., vol. 41, p. 575. 10 pages.
- GOLD MINES OF TIBET. By A. Del Mar. Min. & Sci. Press, vol. 100, p. 254. 3½ columns.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 217. 12½ columns. I.
- PASTO GOLD DISTRICT, COLOMBIA. Min. & Sci. Press, vol. 100, p. 583. 2 columns. I.
- QUARTZ MINES IN COLOMBIA, SOUTH AMERICA. By F. F. Sharpless. Min. & Sci. Press, vol. 97, p. 422. 4½ columns. I.
- GOLD MINING IN COLOMBIA. By F. L. Garrison. Min. Mag., London, vol. 2, p. 369. 15½ columns. I.
- THE FUTURE GOLD OUTPUT OF COLOMBIA. By H. G. Granger. T. A. I. M. E., vol. 39, p. 315. 10 pages.
- ALLUVIAL GOLD DEPOSITS AND MINING IN COLOMBIA. By P. A. Ahg.

- E. & M. J., vol. 90, p. 1098. 4 columns.
- COLOMBIAN GOLD PLACERS T. A. I. M. E., vol. 39, p. 418. 1 page. Table
- PRIMARY GOLD IN COLORADO GRANITE. By J. B. Hastings. T A I. M. E., vol. 39, p. 97. 6 pages. I.
- LESSONS FROM GILPIN COUNTY PRACTICE By G. E. Collins. Min & Sci. Press, vol. 101, p. 366. 11½ columns.
- THE ALICE MINE. Colorado's Largest Ore Body. By R. L. Herrick M. & M., vol. 29, p. 294. 6 columns I.
- REPORT ON THE POVERTY GULCH MINE. By C. W. Henderson. M. & M., vol. 31, p. 586, 5½ columns, I; p. 694, 7 columns, I.
- GOLD ORE NEAR NEWCASTLE, COLORADO. By F. Rickard. Min & Sci. Press, vol. 99, p. 503. 1 column. I.
- THE SAN JUAN REGION, COLORADO. By T. T. Read. Min. & Sci. Press, vol. 97, p. 632, 8 columns, I; p. 668, 10 columns, I
- GOLD DEPOSITS OF SAN JUAN, COLORADO. By W. C. Prosser. M. & M., vol. 31, p. 335. 5 columns. I.
- MINING IN THE SAN JUAN, COLORADO. By W. H. Storms. Min & Sci Press, vol. 101, p. 610, 5½ columns, I; p. 737, 6½ columns, I.; p. 865, 3½ columns, I.
- THE CRESSON MINE, CRIPPLE CREEK, COLORADO. By R. L. Herrick. M. & M., vol. 31, p. 735. 11½ columns. I.
- LA PLATA MOUNTAINS, COLORADO. By R. H. Toll. Min. & Sci. Press, vol. 97, p. 741. 6½ columns. Map.
- TREASURE MOUNTAIN, COLORADO. By C. W. Purington. Min. & Sci. Press, vol. 97, p. 23. 5½ columns. I.
- LAKE FORK EXTENSION OF THE SILVERTON MINING AREA, COLORADO. By L. W. Woolsey. U. S. G. S. Bull. 315, p. 26. 5 pages. 1906.
- MINING IN GEORGETOWN QUADRANGLE. By S. H. Ball M & M., vol. 30, p. 205 9½ columns. Map.
- HOHNS PEAK, COLORADO. E & M J., vol. 86, p. 809. 2½ columns. I
- GOLD PLACER DEPOSITS NEAR FAY, ROUTT COUNTY, COLORADO By H. S. Gale. U. S. G. S., Bull. 340, p. 84. 13 pages I. 1907.
- THE BLACK HILLS OF SOUTH DAKOTA. By W. H. Storms. Min & Sci. Press, vol 101, p 114, 5 columns, I.; p. 144, 7 columns, I; p. 264, 7 columns, I; p. 500, 6 columns; p. 571, 6 columns, p. 669, 6 columns, I.
- DRY PLACERS OF THE BLACK HILLS. Min. & Sci. Press, vol. 101, p. 571. 1½ columns.
- PLACERS OF THE BLACK HILLS, SOUTH DAKOTA Min & Sci Press, vol. 101, p. 573. 2 columns
- GOLD MINING INDUSTRY IN THE DUTCH EAST INDIES. By E. A. Winton. E & M J., vol. 88, p. 513. 4½ columns. Map.
- OCCURRENCE OF AURIFEROUS AND STANIFEROUS TOURMALINE IN SUMATRA. By L. Hundeshagen. E. & M. J., vol. 87, p. 1003. ½ column.
- GOLD MINING IN EGYPT. By C. S. Herzig. Min. & Sci. Press, vol. 95, p. 212. 4½ columns. I.
- AN ENGLISH GOLD MINE E. & M. J., vol. 86, p. 98. ½ column.
- THE BRITISH GOLD FIELDS, ENGLAND. Min. Mag., vol. 2, p. 282, 3 pages; p. 376, 2 pages.
- GOLD MINING IN FRANCE. By T. A. Rickard. Min. Mag, London, vol. 1, p. 283. 4 columns. I.
- GOLD IN FRANCE. P. C. M. & M. Soc. S. A., vol. 7, p. 315. ½ column.
- THE GREATEST GOLD MINE OF FRANCE. By T. T. Read. Min. Mag. London, vol. 4, p. 209. 7 columns. I.
- THE THREE PRODUCING GOLD MINES OF FRANCE. By E. Walch. E & M. J., vol. 87, p. 792 6 columns. I.

- GOLD DEPOSITS OF GEORGIA.** By E. K. Soper. Min. & Sci. Press, vol. 100, p. 923. 3½ columns.
- MOORE'S GOLD MINES, DAHLONEGA, GEORGIA.** Min Mag, vol. 2, p. 24. 3 pages.
- THE GOLD PLACERS OF LUMPKIN COUNTY, GEORGIA.** Min. Mag., vol. 10, p. 457. 20 pages.
- ATLANTA GOLD DISTRICT, IDAHO.** By R. N. Bell. E. & M. J., vol. 86, p. 176. 4 columns. I
- BOISE BASIN, IDAHO.** By W. A. Scott. Min. & Sci. Press, vol. 101, p. 76. 6 columns. I.
- GOLD MINING IN KOREA, 1910.** By J. D. Hubbard. Min. & Sci. Press, vol. 101, p. 236. 5 columns. I.
- GOLD DEPOSITS IN JAPAN.** Min. & Sci. Press, vol. 101, p. 842. 2½ columns.
- THE PLACER DEPOSITS OF KOREA.** T. A. I. M. E., vol. 39, p. 266. 2 pages. I
- COPPER-GOLD SMELTING AT MAGISTRAL.** By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE ARTEAGA MINING DISTRICT, CHIHUAHUA, MEXICO.** E. & M. J., vol. 89, p. 618. 3 columns. I.
- ARTEAGA DISTRICT, CHIHUAHUA, MEXICO.** By W. B. Winston. Min. & Sci. Press, vol. 98, p. 829. 3½ columns. I.
- THE CALABACILLAS MINE, CHIHUAHUA.** By R. T. Sill. E. & M. J., vol. 90, p. 359. 1½ columns. I
- MINING OPERATIONS IN THE STATE OF CHIHUAHUA, MEXICO.** By W. H. Seamon. E. & M. J., vol. 90, p. 654. 6½ columns.
- THE ARTEAGA DISTRICT, CHIHUAHUA.** By L. T. Pockman. E. & M. J., vol. 90, p. 656. 3½ columns. I.
- YOQUIVO MINE AND MILL, WESTERN CHIHUAHUA.** By W. H. Seamon. E. & M. J., vol. 90, p. 811. 4 columns. I.
- PACHUCA DISTRICT, MEXICO.** By J. L. Mennell. Min. & Sci. Press, vol. 100, p. 455. 3 columns. I
- SANTA GERTRUDE'S AND LA BLANCA MINES, PACHUCA, MEXICO.** E. & M. J., vol. 88, p. 670. 1 column. I.
- THE SANTA GERTRUDE'S MINE, PACHUCA, MEXICO.** E. & M. J., vol. 89, p. 214. 9 columns. I
- SOME FEATURES OF MINING AT PACHUCA, MEXICO.** E. & M. J., vol. 86, p. 1051. 4½ columns
- SAN RAFAEL Y ANEXAS MINING COMPANY, PACHUCA, MEXICO.** By E. Girault. E. & M. J., vol. 90, p. 643. 9 columns. I.
- LAS PILARES MINE, SONORA, MEXICO.** By E. M. Robb. M. & M., vol. 31, p. 106. 11½ columns. I.
- OCCURRENCE OF GOLD AND SILVER ORES AT THE LAS PILARES MINE.** M. & M., vol. 106. 2½ columns. I.
- MINAS PEDRAZZINI OPERATIONS NEAR ARIZPE, SONORA, MEXICO.** By E. L. Dufoureq. E. & M. J., vol. 90, p. 1105. 5½ columns
- MINING IN OAXACA, MEXICO.** By E. M. Lawton. Min. & Sci. Press, vol. 99, p. 232. 3½ columns. I.
- THE ESPERANZA MINE, EL ORO, MEXICO.** By W. E. Hindry. Min. Mag., London, vol. 1, p. 131. 10½ columns. I.
- ORE OF THE ESPERANZA MINE, MEXICO.** Min. & Sci. Press, vol. 99, p. 847. 2½ columns.
- MINING IN THE ALAMOS AND ARTEAGA DISTRICTS.** By G. M. Bloomer. E. & M. J., vol. 87, p. 699. 6 columns. I.
- ALAMOS-PROMONTOS DISTRICT, MEXICO.** By T. P. Brinegar. Min. & Sci. Press, vol. 100, p. 553. 3 columns. I.
- MINING AND SMELTING AT ACHOTTA MINE, GUERRERO, MEXICO.** By W. B. Devereux, Jr. E. & M. J., vol. 90, p. 663.

- EL RAYO GOLD MINE, NEAR SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 78. 7 columns. I.
- SAN JOSE DE GRACIA, A GREAT MEXICAN GOLD CAMP. By E. A. H. Tays. E. & M. J., vol. 88, p. 640. 16 columns. I.
- MINING IN THE SETENTRION, MEXICO. By M. R. Lamb. Min. & Sci. Press, vol. 97, p. 782. 5 columns. I.
- THE LLUVIA DE ORO MINE. By E. A. H. Tays. Min. & Sci. Press, vol. 100, p. 59. 3 columns. I.
- CHICO, MEXICO. Min. & Sci. Press, vol. 101, p. 473. 4 columns.
- TOPOGRAPHICAL AND OTHER NOTES ON THE CHOIK-GUADALUPE Y CALVO MINING DISTRICT, MEXICO. By A. W. Warwick. Min. & Sci. Press, vol. 95, p. 686. 6 columns. I.
- MINES OF ZOMELAHUACAN, VERACRUZ, MEXICO. By M. Fishback. E. & M. J., vol. 90, p. 1017. 6½ columns. I.
- CONDITIONS AT THE PALMILLA MINE, PARRAL, MEXICO. By F. W. Smith. E. & M. J., vol. 90, p. 259. 11½ columns. I.
- HINDS CONSOLIDATED MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 598. 3 columns. I.
- CALABACILLAS GOLD MINE, MEXICO. By C. W. Geddes. Min. & Sci. Press, vol. 98, p. 689. 2½ columns. I.
- THE GRANADENA MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- JALISCO AND COLIMA, MEXICO. By W. A. Scott. Min. & Sci. Press, vol. 98, p. 254. 3 columns. I.
- THE MINES OF NORTHWESTERN ALTAR, SONORA, MEXICO. By G. W. Maynard. E. & M. J., vol. 86, p. 71. 5½ columns. I.
- THE ALTAR GOLD PLACER FIELDS OF SONORA, MEXICO. E. & M. J., vol. 90, p. 651. 6½ columns. I.
- DRY PLACERS IN NORTHERN SONORA MEXICO. By F. J. H. Merrill. Min. & Sci. Press, vol. 97, p. 360. 2½ columns. I.
- MINING CEMENT GRAVEL AT ALTAR MEXICO. By A. Coll. M. & M. vol. 31, p. 229. 4 columns. I.
- RECENT DEVELOPMENTS NEAR HELENA, MONTANA. E. & M. J., vol. 90, p. 354. 1½ columns. Map.
- RADERSBURG DISTRICT, MONTANA. Min. & Sci. Press, vol. 101, p. 170. 3 columns. D.
- NOTES ON THE GEOLOGY OF THE RADERSBURG DISTRICT, MONTANA. By D. C. Bard. E. & M. J., vol. 90, p. 599. 1 column.
- GOLD DEPOSITS OF THE LITTLE ROCKY MOUNTAINS, MONTANA. By W. H. Emmons. U. S. G. S., Bull. 340, p. 96. 20½ pages. I. 1907.
- THE GRANITE BIMETALLIC AND CABLE MINES, PHILIPSBURG QUADRANGLE, MONTANA. By W. H. Emmons. U. S. G. S., Bull. 315, p. 31. 25 pages. I. 1906.
- MINES OF MISSOULA COUNTY, MONTANA. By J. P. Rowe. M. & M., vol. 31, p. 581. 6½ columns. I.
- JUDITH BASIN, MONTANA. Min. & Sci. Press, vol. 101, p. 398. 4½ columns. I.
- GEOLOGICAL AND PHYSICAL CONDITIONS OF TONOPAH MINES. By W. P. Jenney. Min. & Sci. Press, vol. 99, p. 685. 3 columns. I.
- THE MINES AND MILLS OF TONOPAH, NEVADA. By G. E. Wolcott. E. & M. J., vol. 87, p. 594. 7 columns. I.
- THE GOLDFIELD TYPE OF ORE OCCURRENCE. By R. T. Hill. E. & M. J., vol. 86, p. 1096. 11½ columns. I.
- GOLDFIELD, NEVADA. By T. A. Rickard. Min. & Sci. Press, vol. 96, p. 559, 6½ columns, I.; p. 664, 5 columns; p. 738, 6½ columns, I.; p. 774, 6½ columns, I.; p. 840, 8 columns, I.; vol. 97, p. 20, 4½ columns, I.; p. 50, 7½ columns, I.

- GOLDFIELD AND THE GOLDFIELD DISTRICT OF NEVADA.** By J. Tyssowski. E & M. J., vol. 87, p. 1229. 6 columns. I.
- RAWHIDE, NEVADA.** By A. Del Mar. E & M. J., vol. 85, p. 853. 6 columns. I.
- RAWHIDE, NEVADA.** By W. F. Boericke. E & M. J., vol. 85, p. 565. 1 column.
- NOTES ON RAWHIDE, NEVADA.** Min. & Sci. Press, vol. 96, p. 424. 3½ columns.
- ORE FORMATION IN THE WONDER DISTRICT, NEVADA.** By E. A. Rutter. E. & M. J., vol. 87, p. 290. 7 columns. I.
- MONTGOMERY-SHOSHONE MINE.** By A. H. Martin. Min. & Sci. Press, vol. 100, p. 289. 3 columns. I.
- KIMBERLY, NEVADA.** By J. A. Carpenter. Min. & Sci. Press, vol. 100, p. 482. 3 columns. I.
- MINING AND MILLING AT RAWHIDE, NEVADA.** By G. E. Wolcott. E. & M. J., vol. 87, p. 345. 11 columns. I.
- THE SEVEN TROUGHS MINING DISTRICT.** By W. M. Hanck. E. & M. J., vol. 85, p. 644. 4 columns. I.
- SEVEN TROUGHS DISTRICT OF NEVADA.** By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 790. 6½ columns.
- MANHATTAN, NEVADA.** E. & M. J., vol. 86, p. 1002. 3½ columns. I.
- NOTES ON THE MANHATTAN PLACERS, NYE COUNTY, NEVADA.** By C. C. Jones. E. & M. J., vol. 88, p. 101. 8 columns. I.
- MINES AND PLANTS OF THE PITTSBURG SILVER PEAK.** By H. Hanson. Min. & Sci. Press, vol. 98, p. 657. 9½ columns. I.
- CAMP ALUNITE, A NEW NEVADA GOLD DISTRICT.** By R. T. Hill. E. & M. J., vol. 86, p. 1203. 11 columns. I.
- REMINISCENCES OF GOLDFIELD, NEVADA.** By M. R. Lamb. E. & M. J., vol. 87, p. 441. 5 columns.
- BANNOCK, NEVADA.** By C. S. Thomas. Min. & Sci. Press, vol. 99, p. 820. 1 column. I.
- ROUND MOUNTAIN, NEVADA.** By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 568. 2½ columns. I.
- ROUND MOUNTAIN, NEVADA.** By F. L. Ransome. U. S. G. S., Bull. 380, p. 44. 4 pages. I. 1908.
- ROUND MOUNTAIN, NEVADA.** By G. A. Packard. Min. & Sci. Press, vol. 96, p. 807. 4½ columns. I.
- NATIONAL, NEVADA.** By H. C. Cutler. Min. & Sci. Press, vol. 101, p. 606. 3½ columns. I.
- SOME BULLFROG MINES.** By W. H. Spaulding. E. & M. J., vol. 85, p. 159. 5 columns.
- NOTES ON OPERATIONS IN JARBRIDGE CAMP, NEVADA.** By W. W. Fisk. E. & M. J., vol. 90, p. 763. 5½ columns. Map.
- REPORT ON MINING GEOLOGY OF EUREKA DISTRICT, NEVADA.** By J. S. Curtis. U. S. G. S., 4th Ann. Rept., pp. 221-251. 1882-83. I.
- THE BRISTOL MINES, NEVADA.** By S. L. Goodale. M. & M., vol. 30, p. 507. 4 columns. I.
- JARBRIDGE, NEVADA.** By W. A. Scott. Min. & Sci. Press, vol. 100, p. 613. 4½ columns. I.
- SYLVANITE DISTRICT, NEW MEXICO.** By G. A. Martin. E. & M. J., vol. 86, p. 962. 3½ columns.
- SYLVANITE, NEW MEXICO, THE NEW GOLD CAMP.** By F. A. Jones. E. & M. J., vol. 86, p. 1101. 9 columns. I.
- OCCURRENCE OF ORE AT SYLVANITE, NEW MEXICO.** E. & M. J., vol. 86, p. 1102. 3 columns. I.
- THE BLACK RANGE MINING DISTRICT, NEW MEXICO.** By M. Fishback. E. & M. J., vol. 89, p. 911. 4 columns. I.
- THE COCHITI MINING DISTRICT, NEW MEXICO.** By P. E. Barbour. E. & M. J., vol. 86, p. 173. 6½ columns. I.

- REVIVAL OF MINING IN THE MOGOLONS, NEW MEXICO. By E. G. Spilsbury. E & M J, vol. 88, p. 62. 10½ columns. I
- THE LORDSBURG MINING DISTRICT, NEW MEXICO. By E. D. Fry. E. & M. J., vol. 90, p. 820. 1 column.
- MINES OF THE LORDSBURG DISTRICT, NEW MEXICO. By J. L. Wells. E. & M J, vol. 87, p. 890. 2½ columns.
- THE MANZANO GROUP OF THE RIO GRANDE VALLEY, NEW MEXICO. By W. T. Lee and G. H. Girty. U. S. G. S., Bull. 389. 141 pages. I. 1909.
- NEW MEXICO GOLD GRAVELS. By J. A. Cartuth M. & M., vol. 31, p. 117. 5 columns. I.
- GOLD IN THE ADIRONDACKS. E. & M. J, vol. 89, p. 620. 5 columns.
- GOLD AND SILVER MINING IN NEW ZEALAND. By W. Wilson. Min. & Sci Press, vol. 100, p. 520. 4 columns. I.
- GOLD AND SCHEELITE NEAR MACRAES, NEW ZEALAND. By P. Morgan. Min. & Sci. Press, vol. 99, p. 33. 2½ columns.
- THE GOLD-BEARING LODES OF BENDIGO AND CARRICK, NEW ZEALAND. By J. Park. Min. & Sci Press, vol. 97, p. 121. 3½ columns. I.
- THE ORE DEPOSITS OF WAIHI, NEW ZEALAND. By A. M. Finlayson. Min. Mag, London, vol. 2, p. 281. 8½ columns. I.
- SCHEELITE AND GOLD NEAR MACRAES, NEW ZEALAND. Min. & Sci. Press, vol. 99, p. 33. 2½ columns.
- THE GOLD MINING INDUSTRY IN NICARAGUA. By T. L. Carter. E. & M J, vol. 90, p. 1204. 8½ columns. I.
- THE MINING INDUSTRY OF NICARAGUA. By T. L. Carter. M. & M., vol. 31, p. 566. 4½ columns. I.
- PIZ-PIZ DISTRICT, NICARAGUA. By W. A. Connelly. Min. & Sci. Press, vol. 100, p. 350. 4 columns. Map.
- GOLD IN EASTERN NICARAGUA. By C. C. Semple. Min. & Sci. Press, vol. 99, p. 221. 6½ columns. I.
- NOTES ON THE NICARAGUAN GOLDFIELDS. By M. R. Walker E & M. J., vol. 88, p. 263. 3½ columns. I.
- HOW CAN THE GOLD MINING INDUSTRY OF NOVA SCOTIA BE ASSISTED? By E. P. Brown. J. M. Soc N S., vol. 13, p. 33. 13½ pages.
- SOME OF THE CAUSES OF THE PRESENT CONDITION OF GOLD MINING IN NOVA SCOTIA. By G. W. Stuart. J. M Soc N S, vol. 12, p. 85. 19½ pages.
- GOLD MEASURES OF TANGIER, NOVA SCOTIA. By G. A. Packard. Min & Sci Press, vol. 95, p. 430. 4 columns. I.
- THE OLDHAM STERLING GOLD MINE, NOVA SCOTIA. By C. V. Brennan. J. C. M I, vol. 10, p. 426. 16 pages. I.
- A PRACTICAL SUGGESTION FOR TESTING THE GOLD MINES OF NOVA SCOTIA. By F. P. Rounan. J. M. Soc. N. S, vol. 13, p. 27. 6 pages.
- WICHITA MOUNTAINS, OKLAHOMA. By G. W. Kneisly. Min. & Sci Press, vol. 97, p. 873. 1 column. Map.
- REPORT ON ORE DEPOSITS OF THE WICHITA MOUNTAIN, OKLAHOMA. By H. F. Bain. U. S. G. S., Professional Paper 31, 97 pages. I. 1904.
- CRACKER CREEK DISTRICT, OREGON. By J. T. Padree. Min. & Sci. Press, vol. 100, p. 585. 3½ columns. I.
- FAULTING AND VEIN STRUCTURE IN THE CRACKER CREEK GOLD DISTRICT, BAKER COUNTY, OREGON. By J. T. Padree. U. S. G. S., Bull. 380, p. 85. 8 pages. I. 1908.
- THE NORTH POLE MINE, BAKER COUNTY, OREGON. By E. Melzer. E. & M J, vol. 89, p. 868. 4½ columns. I.

- GOLD MINES IN EASTERN OREGON. Min. & Sci. Press, vol. 101, p. 141. 2½ columns. I
- RYE VALLEY GOLD MINES, OREGON. By A. Mathez. Min. & Sci. Press, vol. 99, p. 687. 1½ columns. I.
- MINES OF THE RIDDLES QUADRANGLE, OREGON. By J. S. Diller and G. F. Kay. U. S. G. S., Bull. 340, p. 134. 19 pages. I 1907.
- NOTES ON THE BOHEMIA MINING DISTRICT, OREGON. By D. F. MacDonald. U. S. G. S., Bull. 380, p. 80. 5 pages. 1908.
- PLACER GRAVELS OF THE SUMPTER AND GRANITE DISTRICTS, EASTERN OREGON. By J. T. Pardee. U. S. G. S., Bull. 430, p. 59. 7 pages. I. 1909.
- PLACERS OF WALDO, SOUTH OREGON. By J. M. Nicol. Min. & Sci. Press, vol. 99, p. 122. 2½ columns. I
- BEDDED GOLD QUARTZ VEINS NEAR POTO, PERU. By E. C. Thurston. E. & M. J., vol. 90, p. 597. 3½ columns. I.
- PERUVIAN PLACER MINES. Min. & Sci. Press, vol. 101, p. 741. ¼ column.
- SAN ANTONIO DE POTO HYDRAULIC MINE, PERU. By W. E. G. Firebrace. Min. & Sci. Press, vol. 97, p. 780. 4 columns. I.
- ANDEAN PLACERS, PERU AND BOLIVIA. Min. & Sci. Press, vol. 99, p. 61. 1 column.
- THE PHILIPPINE GOLD MINES. By M. Woolley. M. & M., vol. 31, p. 464. 4 columns. I.
- GOLD IN THE PHILIPPINES. By H. G. Ferguson. E. & M. J., vol. 88, p. 1165. 5 columns. I.
- ABORAY DISTRICT, MASBATE, PHILIPPINE ISLANDS. Min. & Sci. Press, vol. 100, p. 388. 3 columns.
- PARACALE AND MAMBULAO DISTRICTS. By W. D. Smith. Min. & Sci. Press, vol. 100, p. 453. 4 columns.
- RUSSIAN FAR EASTERN GOLD FIELD. M. & M., vol. 31, p. 447. 2 columns.
- GOLD MINING IN SIBERIA. Min. & Sci. Press, vol. 20, p. 394. 1½ columns.
- GOLD AND OTHER MINERALS OF EASTERN SIBERIA. By S. F. G. White. E. & M. J., vol. 87, p. 1034. 4½ columns.
- MINING IN SIBERIA. By C. W. Purington. Min. & Sci. Press, vol. 98, p. 251. 3 columns.
- KOLCHAN PLACER OF THE ARSK GOLD-FIELDS, LTD. By C. W. Purington. E. & M. J., vol. 90, p. 1202. 5½ columns.
- GOLD AND SILVER IN TENNESSEE. Min. Mag., vol. 8, p. 237. 4½ pages.
- GOLD AND SILVER IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. 1 column.
- RECONNAISSANCE OF SOME GOLD AND TIN DEPOSITS OF THE SOUTHERN APPALACHIANS. By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I 1906.
- EXAMINATIONS AND EXPLORATIONS ON THE GOLD-BEARING BELTS OF THE ATLANTIC STATES. Min. Mag., vol. 2, p. 378, 10½ pages, I; vol. 3, p. 161, 7½ pages.
- THE SOUTH UTAH MINE AND MILL. By L. Palmer. M. & M., vol. 31, p. 592. 8½ columns. I.
- MINING IN THE TINTIC DISTRICT OF UTAH. By L. A. Palmer. M. & M., vol. 31, p. 553. 8 columns. I.
- MINES AND MILL OF THE CONSOLIDATED MERCUR COMPANY. By R. H. Allen. E. & M. J., vol. 89, p. 1273. 13½ columns. I.
- MINES IN REPUBLIC DISTRICT, WASHINGTON. By W. A. Scott. Min. & Sci. Press, vol. 101, p. 200. 4 columns. I.
- GOLD-BEARING RIVER SANDS OF NORTHEASTERN WASHINGTON. By A. J. Collier. U. S. G. S., Bull. 315, p. 56. 15 pages. 1906.
- CUBAN GOLD MINES. By E. B. Wilson. M. & M., vol. 31, p. 240. 1 column.

CUBAN GOLD MINING. By E. W. Dennison. Min & Sci. Press, vol. 97, p. 500. $\frac{1}{2}$ column.

GOLD MINING IN PORTO RICO. By W. B. McKinlay. Min & Sci. Press, vol. 97, p. 96, $5\frac{1}{2}$ columns; p. 126, $7\frac{1}{2}$ columns, I

GOLD DEVELOPMENTS IN CENTRAL UTAH COUNTY, WYOMING, AND AT OTHER POINTS ON SNAKE RIVER By A. R. Schultz. U. S. G. S., Bull. 315, p. 71. 18 pages. I 1906.

WIND RIVER PLACERS, WYOMING. By J. H. Hastings. Min. & Sci. Press, vol. 98, p. 864. 1 column.

See also THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.

Occurrence of Graphite

GRAPHITE: Its Occurrence and Use. M. & M., vol. 30, p. 394. $3\frac{3}{4}$ columns. I.

CANADIAN GRAPHITE. By H. P. H. Brumell. J. C. M. I., vol. 10, p. 83 20 pages

MODES OF OCCURRENCE OF CANADIAN GRAPHITE By H. P. H. Brumell. J. C. M. I., vol. 11, p. 236. $14\frac{1}{2}$ pages.

CANADIAN GRAPHITE By H. M. Lamb. E. & M. J., vol. 85, p. 360 $5\frac{1}{2}$ columns.

GRAPHITE DEPOSITS NEAR CARTERSVILLE, GEORGIA. By C. W. Hayes and W. C. Phalen. U. S. G. S., Bull. 340, p. 463. $2\frac{1}{2}$ pages. 1907.

GRAPHITE IN MAINE By G. O. Smith. U. S. G. S., Bull. 285, p. 480. 4 pages. 1905.

THE GRAPHITE MINES OF SANTA MARIA, MEXICO. By J. C. Mills. M. & M., vol. 29, p. 98. $2\frac{1}{2}$ columns. I.

THE FLAKE GRAPHITE INDUSTRY IN THE UNITED STATES. By F. D. Chester. E. & M. J., vol. 88, p. 785. 2 columns.

SUPPOSED DEPOSITS OF GRAPHITE NEAR BRIGHAM, UTAH. By H. S.

Gale. U. S. G. S., Bull. 430, p. 639. 2 pages 1909.

GRAPHITE IN THE HAYSTACK HILLS, LARAMIE COUNTY, WYOMING. By S. H. Ball U. S. G. S., Bull. 315, p. 426. 2 pages. 1906.

See also DRY CONCENTRATION.

Auriferous Gravels

BLACK SANDS. By A. R. Townsend. E. & M. J., vol. 85, p. 307. $4\frac{1}{2}$ columns.

GRAVEL MINING IN TASMANIA Min. Mag., London, vol. 3, p. 383 $1\frac{1}{2}$ columns. I

THE PACIFIC COAST BEACH SANDS. By C. Bartlett. M. & M., vol. 30, p. 375. $3\frac{1}{2}$ columns.

USEFUL MINERALS IN BLACK SANDS OF PACIFIC COAST. By D. T. Day and R. H. Richards. U. S. G. S., Mineral Resources, 1905. 73 pages.

DRY PLACERS IN NORTHERN SONORA, MEXICO. Min & Sci. Press, vol. 97, p. 380. $2\frac{1}{2}$ columns. I

See also OCCURRENCE OF GOLD.

Occurrence of Gypsum

GYPSUM MINING. By W. J. Jones. M. & M., vol. 29, p. 490. $1\frac{1}{2}$ columns. I.

THE GYPSUM DEPOSITS OF THE PALEN MOUNTAINS, RIVERSIDE COUNTY, CALIFORNIA. By E. C. Harder. U. S. G. S., Bull. 430, p. 407. 10 pages. I. 1909.

GYPSUM DEPOSITS NEAR CANE SPRINGS, KERN COUNTY, CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 430, p. 417. 2 pages. 1909.

A RECONNAISSANCE OF THE GYPSUM DEPOSITS OF CALIFORNIA. By F. L. Hess. U. S. G. S., Bull. 413. 37 pages. I. 1910.

GYPSUM OF THE UNCOMPAHGRE REGION, COLORADO. By C. E. Sieben-thal. U. S. G. S., Bull. 285, p. 401. 4 pages. I. 1905.

- GYPNUM DEPOSITS OF MONTANA.** By J P Rowe. E. & M J, vol. 85, p. 1243. 3 columns. I.
- GYPNUM IN NORTHWESTERN NEW MEXICO.** By M. K. Shaler. U S. G. S., Bull. 315, p. 260. 5 pages. I 1906.
- GYPNUM ON CAPE BRETON ISLAND, NOVA SCOTIA.** By J Tyssowski. E & M. J, vol. 88, p. 569. 4 columns. Map.
- OKLAHOMA GYPNUM DEPOSITS.** E. & M. J, vol 85, p. 315. $\frac{1}{2}$ column.
- SALT AND GYPNUM OF THE PRESTON VALLEY OF THE HOLSTON RIVER, VIRGINIA.** By H. D. Rogers. Min. Mag., vol. 4, p. 28. 7 pages.
- GYPNUM DEPOSITS OF THE LARAMIE DISTRICT, WYOMING.** By C. E. Siebenthal. U. S. G S, Bull. 285, p. 404. 2 pages. 1905.
- Occurrence of Iron Ores**
- THE SUPPLY OF IRON** By J F. Kemp. Min Mag., London, vol. 3, p. 363. 7 columns.
- THE SUPPLIES AND RESERVES OF IRON ORES.** By J. Birkinbine. J. C. M. I., vol. 10, p. 134. 14 $\frac{1}{2}$ pages.
- MAGNETIC IRON ORE: Magnetite, Magnetic Oxide of Iron, and Lode-stone.** Min. Mag., vol. 4, p. 121. 14 pages.
- THE BLACK BAND, OR MUSHET IRON-STONE.** Min. Mag., vol. 4, p. 19. 9 $\frac{1}{2}$ pages.
- ON THE OCCURRENCE OF ORES OF IRON IN THE AZOIC SYSTEM.** By J. D. Whitney. Min. Mag, vol. 7, p. 67. 4 pages.
- FRANKLINITE IRON ORES: Their Uses and Quantity.** Min. Mag., vol. 10, p. 105. 4 pages.
- AGGLOMERATION OF MANGANIFEROUS LIMONITE ORE.** By F. Witte. E. & M. J., vol. 90, p. 216. 4 $\frac{1}{2}$ columns. I.
- IRON IN THE BELGIAN CONGO.** T. A. I. M. E., vol. 41, p. 210. 4 pages.
- IRON ORES, FUELS AND FLUXES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S G S, Bull. 400. 204 pages. I. 1910
- IRON OPERATIONS OF THE BIRMINGHAM DISTRICT** By E Higgins. E. & M. J., vol. 86, p. 1043. 18 $\frac{1}{2}$ columns. I
- IRON OPERATIONS IN NORTHEASTERN ALABAMA.** By E Higgins E. & M. J., vol 86, p. 1083. 12 columns. I.
- THE IRON ORE INDUSTRY IN ALABAMA.** By E. A. Smith. E. & M. J., vol. 85, p. 1159. 4 columns.
- AN ESTIMATE ON THE TONNAGE OF AVAILABLE CLINTON IRON ORE IN THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S, Bull. 340, p. 308. 10 pages. I. 1907.
- THE CLINTON OR RED ORES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G. S., Bull. 315, p. 130. 21 $\frac{1}{2}$ pages. 1906.
- THE BROWN IRON ORES OF THE RUSSELLVILLE DISTRICT, ALABAMA.** By E. F. Burchard. U. S. G S., Bull. 315, p. 152. 7 pages 1906.
- THE GRAY IRON ORES OF TALLADEGA COUNTY, ALABAMA.** By P. S. Smith. U. S. G. S, Bull. 315, p. 161. 23 $\frac{1}{2}$ pages. 1906.
- THE CLINTON IRON-ORE DEPOSITS OF ALABAMA.** By E. F. Burchard. T. A. I. M. E., vol. 40, p. 75. 59 pages. I.
- THE OCCURRENCE OF IRON ORE NEAR HAINES, SOUTHEASTERN ALASKA.** By A. Knopf. U. S. G. S., Bull. 442, p. 144. 3 pages. 1909.
- TWO IMPORTANT IRON ORE DEPOSITS OF AUSTRALIA.** By J. B. Wilson. E. & M. J., vol 89, p. 724. 16 $\frac{1}{2}$ columns. I.
- IRON ORE DEPOSITS OF BRAZIL.** By O. A. Derby. E. & M. J, vol. 88, p. 1258. 3 $\frac{1}{2}$ columns.

- BRAZIL'S IRON-ORE DEPOSITS.** By G. E. Anderson M. & M., vol 31, p. 7. 5 columns.
- MAGNETITE DEPOSITS OF TEXADA AND VANCOUVER ISLANDS.** By E. Lindeman. J C M I, vol 13, p. 107. 15½ pages Map.
- THE EMMA MINE BOUNDARY DISTRICT, BRITISH COLUMBIA** By F. Keffer. J. C. M I, vol 10, p. 188 6½ pages I. Map.
- OCCURRENCE OF MAGNETITE IN THE EMMA MINE, BRITISH COLUMBIA** J C M. I, vol. 10, p. 188. 6 pages I.
- AN IRON DEPOSIT IN THE CALIFORNIA DESERT REGION** By C. C Jones E. & M. J., vol. 87, p. 785. 10 columns. I
- IRON ORES OF CALIFORNIA.** By H. C. Harder. Min. & Sci. Press, vol 101, p. 79. 3½ columns Map
- OCCURRENCE OF AN IRON ORE DEPOSIT IN THE CALIFORNIA DESERT REGION.** E & M. J., vol. 87, p. 785. 10 columns. I
- SOME IRON ORES OF WESTERN AND CENTRAL CALIFORNIA.** By E. C. Harder. U. S. G. S., Bull. 430, p. 219. 8½ pages. 1909.
- THE IRON AGE IRON-ORE DEPOSIT, NEAR DALE, SAN BERNARDINO COUNTY, CALIFORNIA.** By E. C. Harder and J. L. Rich U. S. G. S., Bull. 430, p. 228. 12 pages I 1909.
- IRON ORES OF THE SOUTHWEST.** By C. C. Jones M. & M., vol 31, p. 574. 4½ columns
- CHROME ORE IN CALIFORNIA.** By C. G. Yale. E. & M. J., vol 85, p. 101 ½ column.
- SOME CHROMITE DEPOSITS IN WESTERN AND CENTRAL CALIFORNIA.** By E. C. Harder. U. S. G. S., Bull. 430, p. 167. 16½ pages. I. 1909.
- THE IRON ORES OF ONTARIO.** By A. B. Willmott. J. C. M I., vol. 11, p. 106. 18 pages.
- THE IRON ORES OF CANADA** By C. K. Leith J C M I, vol 11, p. 91. 16 pages.
- OCCURRENCE OF IRON ORES AT BRUCE MINES, ONTARIO.** J C. M I, vol. 10, p 158. 2 pages. D
- IRON MINING POSSIBILITIES IN THE PROVINCE OF QUEBEC** By F. Cirkel J C M I., vol 10, p 108. 10 pages. D.
- IRON RANGES OF NORTHERN AND NORTHWESTERN ONTARIO** E. & M J, vol 89, p. 360 7 columns
- THE MOOSE MOUNTAIN IRON RANGE, WITH SPECIAL REFERENCE TO THE PROPERTIES OF MOOSE MOUNTAIN, LIMITED.** By N. L. Leach J. C. M. I, vol 11, p 147. 4 pages
- THE BRUCE MINES, ONTARIO, 1846-1906.** By H. J. Carnegie Williams. J C. M I, vol 10, p 147. 22 pages. I
- THE HELEN MINE, MICHIGICOTEN, ONTARIO Iron Ore** By R. W. Seelye. J. C M I., vol. 13, p. 121. 14½ pages. I
- CHROME IRON MINING AND MILLING IN CANADA.** By H. F. Strangways. E. & M. J., vol. 85, p. 595. 7 columns. I.
- CHROME ORE IN CANADA.** By P. Thompson. E. & M J., vol. 88, p. 726. 2½ columns.
- THE MOOSE MOUNTAIN IRON RANGE, CANADA.** By J J. Bell E & M. J, vol 85, p 805. 2½ columns I.
- THE IRON RANGES EAST OF LAKE NIPIGON, ONTARIO** By A. P. Coleman and E. S. Moore. E. & M. J, vol. 83, p 445. 2 columns.
- CANADIAN IRON ORE INDUSTRY.** M. & M., vol 31, p. 455. 6½ columns. I.
- MINING IRON UNDER THE SEA.** By H. W. Buker. M. & M., vol. 31, p. 569. 7 columns. I.
- IRON, STEEL AND FUEL IN CHINA.** By W. D. B. Dodson Min. & Sci. Press, vol. 97, p 494. 2½ columns.

- THE TAYEH IRON MINES, CHINA By A. J. Seltzer Min. & Sci Press, vol. 100, p. 546. 5 columns I
- THE TAYLOR PEAK AND WHITEPINE IRON ORE DEPOSITS, COLORADO By E. C. Harder. U. S. G. S., Bull. 380, p. 188. 10½ pages. I. 1908.
- TAYLOR PEAK IRON DEPOSITS By E. C. Harder. Min. & Sci Press, vol. 100, p. 615 5 columns I
- THE HEMATITE MINES OF CUMBERLAND, ENGLAND. By L. W. Mayer. E. & M. J., vol. 86, p. 358 18½ columns. I
- IRON ORES NEAR ELLIJAY, GEORGIA. By W. C. Phalen. U. S. G. S., Bull. 340, p. 330. 5 pages. 1907.
- REVIEW OF FOSSIL IRON ORE DEPOSITS OF GEORGIA. By S. M. Ball. E. & M. J., vol. 88, p. 200. 13½ columns. I.
- GEORGIA BROWN IRON ORE WASH-ERIES By E. F. McCrossin M. & M., vol. 31, p. 294. 2½ columns. I
- THE LORRAINE DEPOSITS OF OÖLITIC IRON ORE, GERMANY. By Tony Callot. E. & M. J., vol. 87, p. 1221. 16 columns. I.
- THE ILSEDE HÜTTE IRON MINES AT PEINE, GERMANY. By L. W. Mayer. T. A. I. M. E., vol. 39, p. 351 6½ pages. I
- IRON RESOURCES OF THE REPUBLIC OF MEXICO. By E. Ordoñez E. & M. J., vol. 90, p. 665. 6½ columns.
- IRON EXPLORATIONS IN OAXACA, MEXICO. E. & M. J., vol. 90, p. 668. 10 columns. I.
- EXPLORATION OF CERTAIN IRON ORE AND COAL DEPOSITS IN THE STATE OF OAXACA, MEXICO. By J. L. W. Birkinbine. T. A. I. M. E., vol. 41, p. 166 23 pages. I.
- NOTES FROM THE LAKE SUPERIOR IRON RANGES. By D. E. Woodbridge. E. & M. J., vol. 89, p. 863. 3½ columns.
- THE GOGEBIC RANGE. T. L. S. M. I., vol. 15, p. 10. 16 pages.
- THE MARQUETTE IRON RANGE. By G. A. Newett. T. L. S. M. I., vol. 14, p. 19 12 pages Map.
- DEVELOPMENT IN THE MARQUETTE RANGE IRON ORE MINES M. & M., vol. 30, p. 195 6 columns I.
- IRON MINING IN MINNESOTA By E. K. Soper. Min. & Sci Press, vol. 101, p. 767. 5½ columns I
- IRON MINING AT COLORAINE, MINNESOTA By A. H. Fay E. & M. J., vol. 88, p. 770. 3 columns. I
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder U. S. G. S., Bull. 430, p. 240 6 pages I 1909
- WHITEPINE IRON-ORE DEPOSITS. By E. C. Harder Min. & Sci. Press, vol. 100, p. 387. 3 columns. I.
- IRON ORES NEAR DAYTON, NEVADA. By E. C. Harder Min. & Sci Press, vol. 101, p. 212. 2 columns Map.
- AMARILLA IRON AND PHOSPHATE DEPOSITS, NEVADA By O. H. Hershey. Min. & Sci Press, vol. 97, p. 535. 3½ columns.
- PYRITE MINING IN NEW HAMPSHIRE. By A. H. Fay. E. & M. J., vol. 88, p. 463 2 columns I
- IRON ORE IN NEW JERSEY. By H. W. Kummel. E. & M. J., vol. 85, p. 1193 2 columns
- IRON ORE OF NEW JERSEY. Geological Occurrence, Properties and Metallurgy. By W. Kitchell Min. Mag., vol. 8, p. 332, 16 pages; p. 434. 4 pages.
- THE HANOVER IRON ORE DEPOSITS, NEW MEXICO By S. Paige. U. S. G. S., Bull. 380, p. 199. 16 pages. I. 1908.
- HANOVER IRON-ORE DEPOSITS, NEW MEXICO. By S. Paige. Min. & Sci. Press, vol. 100, p. 285. 3½ columns I.
- THE FOREST OF DEAN IRON MINE, NEW YORK By G. C. Stoltz E. & M. J., vol. 85, p. 1091. 5½ columns I.

- THE MAGNETITE BELTS OF PUTNAM COUNTY, NEW YORK. By C. A. Stewart. Sch. Mines Quart., vol. 29, p. 283. 12 pages. I.
- THE IRON DEPOSITS OF NEW YORK STATE. By J. D. Whitney. Min. Mag., vol. 7, p. 255. 3½ pages.
- THE CLINTON IRON ORE DEPOSITS IN NEW YORK STATE. By D. H. Newland. T. A. I. M. E., vol. 40, p. 165. 19½ pages. I.
- GEOLOGY OF THE IRON ORE DEPOSIT, ORANGE COUNTY, NEW YORK. E. & M. J., vol. 85, p. 1091. 2 columns. I.
- NEW BRUNSWICK AND THE ACADIAN IRON MINES. Min. Mag., vol. 6, p. 117. 8 pages.
- IRON ORES OF NOVA SCOTIA. By P. Thompson. E. & M. J., vol. 88, p. 358. 1½ columns.
- A NEW IRON ORE FIELD IN THE PROVINCE OF NEW BRUNSWICK. By J. E. Hardman. J. C. M. I., vol. 11, p. 156. 9 pages.
- THE DISCOVERY OF IRON ORE IN THE NEW BRUNSWICK PROVINCE. J. C. M. I., vol. 11, p. 159. 6 pages.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN PENNSYLVANIA. By A. C. Spencer. U. S. G. S., Bull. 359. 102 pages. I. 1908.
- MAGNETITE DEPOSITS OF THE CORNWALL TYPE IN BERKS AND LEBANON COUNTIES, PENNSYLVANIA. By A. C. Spencer. U. S. G. S., Bull. 315, p. 185. 4½ pages. 1906.
- THE JONES IRON MINE, DILLSBURG, PENNSYLVANIA. By A. C. Spencer. U. S. G. S., Bull. 430, p. 247. 3 pages. 1909.
- THE CLINTON IRON ORE DEPOSITS IN THE STONE VALLEY, HUNTINGDON COUNTY, PENNSYLVANIA. By J. J. Rutledge. T. A. I. M. E., vol. 40, p. 134. 30 pages. I.
- DEPOSITS OF BROWN IRON ORE NEAR DILLSBURG, YORK COUNTY, PENNSYLVANIA. By E. C. Harder. U. S. G. S., Bull. 430, p. 250. 5½ pages. 1909.
- PRODUCTION OF IRON ORES IN SPAIN. By H. A. McBratney. M. & E. M., vol. 31, p. 577. 6½ columns. I.
- THE GEOLOGICAL RELATION OF THE SCANDINAVIAN IRON ORES. By H. Sjogren. T. A. I. M. E., vol. 38, p. 766. 69 pages. I.
- TONNAGE ESTIMATES OF CHATTAHOOGA IRON ORE IN THE CHATTAHOOGA REGION OF TENNESSEE, GEORGIA AND ALABAMA. By E. F. Rulmer. U. S. G. S., Bull. 380, p. 1-61. 100 pages. 1908.
- IRON OPERATIONS IN THE CHATTAHOOGA DISTRICT. By E. F. Rulmer. E. & M. J., vol. 87, p. 1-15. 15 columns. I.
- PRELIMINARY REPORT OF PRE-CAMBRIAN GEOLOGY AND IRON ORES OF LIANO COUNTY, TENNESSEE. By S. Paige. U. S. G. S., Bull. 430, p. 256. 12 pages. I. 1909.
- IRON IN TENNESSEE. Min. Mag., vol. 98, p. 823. 1 column.
- GEOLOGICO-GEOGRAPHICAL DISTRIBUTION OF THE IRON ORES OF THE EASTERN U. S. By J. C. Stock. T. A. I. M. E., vol. 1: 2, p. 1380.
- IRON ORE SUPPLY OF THE UNITED STATES. By C. W. Hayes. Min. & Sci. Press, vol. 98, p. 789. 3 columns.
- IRON OCCURRENCES IN THE EASTERN HALF OF THE UNITED STATES. E. & M. J., vol. 90, p. 294. 2½ columns. Map.
- IRON ORES EAST OF THE MISSISSIPPI RIVER. By J. B. Smith. U. S. G. S., Mineral Resources, 188-89, vol. 8. 65 pages.
- THE IRON ORES OF THE INDIAN SPRINGS DISTRICT, SOUTHERN VIRGINIA. By C. K. Leitch. U. S. G. S., Bull. 338. 102 pages. I. 1908.
- THE IRON ORES OF THE APPALACHIAN REGION IN VIRGINIA. By E. C. Harder. U. S. G. S., Bull. 380, p. 215. 40 pages. I. 1908.
- THE PRIDMORE IRON ORE COMPANY'S MINES, VIRGINIA. By W. A. Rogers.

- Min. Mag., vol. 3, p. 489, 8½ pages; vol. 5, p. 397; 14 pages. I Map
- IRON ORES OF SANTIAGO, CUBA. By E. B. Wilson. M. & M., vol. 31, p. 245. 8½ columns. I.
- THE RESIDUAL BROWN IRON ORES OF CUBA. By C. M. Weld. T. A. I. M. E., vol. 40, p. 299. 13½ pages. I.
- THREE DEPOSITS OF IRON ORE IN CUBA. By A. C. Spencer. U. S. G. S., Bull. 340, p. 318. 12 pages. I. 1907.
- THE IRON ORES OF WISCONSIN. By E. Daniels. Min. Mag., vol. 10, p. 13. 12 pages.
- THE HARTVILLE IRON-ORE RANGE, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 190. 15½ pages. I. 1906.
- TITANIFEROUS IRON ORE OF IRON MOUNTAIN, WYOMING. By S. H. Ball. U. S. G. S., Bull. 315, p. 206. 7 pages. 1906.
- See also THE IRON TRADE.
- See also THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.
- Occurrence of Lead and Zinc Ores**
- LEAD INDUSTRY. By C. Kirchoff, Jr. U. S. G. S., Mineral Resources 1883 and 1884, vol. 14.
- ST. EUGENE MINE AND MILL, EAST KOOTENAY, BRITISH COLUMBIA. By E. Jacobs. E. & M. J., vol. 89, p. 420. 7 columns. I.
- LEAD MINES IN SHAN STATES, CHINA. E. & M. J., vol. 88, p. 550. 16½ columns. I.
- OCCURRENCE OF LEAD ORE AT LEADVILLE. E. & M. J., vol. 89, p. 263. 4 columns. I.
- THE LEADVILLE DOWNTOWN DISTRICT. Min. & Sci. Press, vol. 95, p. 58. 1 column.
- THE MONTEZUMA MINING DISTRICT, COLORADO. By E. A. Ritter. E. & M. J., vol. 85, p. 241. 9½ columns. I.
- THE GREENSIDE LEAD MINES, CUMBERLAND, ENGLAND. By E. T. Borlase. E. & M. J., vol. 85, p. 297. 10 columns. I.
- LEAD MINING AT MECHERNICH, PRUSSIA. By L. W. Mayer. E. & M. J., vol. 86, p. 169. 11½ columns. I.
- THE WILLISTON LEAD AND COPPER MINE, NORTHAMPTON DISTRICT, MASSACHUSETTS. By C. K. Richardson. Min. Mag., vol. 2, p. 395, 2 pages; p. 634, 2 pages.
- THE CABRILLAS LEAD MINES OF COAHUILA, MEXICO. By S. J. Lewis. E. & M. J., vol. 89, p. 1071. 8 columns. I.
- THE GRANADENA MINES, MEXICO. By S. F. Shaw. Min. & Sci. Press, vol. 97, p. 396. 5½ columns. I.
- MINING AND TRANSPORTATION AT SANTA EULALIA. By C. T. Rice. E. & M. J., vol. 86, p. 33. 9½ columns. I.
- ORES AND MINES OF SANTA EULALIA, MEXICO. By C. T. Rice. E. & M. J., vol. 85, p. 1283. 9 columns. I.
- THE ORE DEPOSITS OF SANTA EULALIA, MEXICO. By C. T. Rice. E. & M. J., vol. 85, p. 1229. 10 columns. I.
- THE CUCHILLO PARADO DISTRICT. By R. H. Burrows. Min. & Sci. Press, vol. 95, p. 408. 1½ columns. I.
- LEAD MINING IN THE JOPLIN DISTRICT. By L. L. Wittich. M. & M., vol. 30, p. 743. 4½ columns. I.
- OPERATIONS OF THE DOE RUN LEAD COMPANY. By A. H. Fay. E. & M. J., vol. 89, p. 610. 9 columns. I.
- THE YELLOW PINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- THE SHELBURNE LEAD MINING COMPANY, NEW HAMPSHIRE. By J. T. Hodge. Min. Mag., vol. 1, p. 27, 7½ pages, I.; vol. 3, p. 481, 10 pages.
- LUNA COUNTY, NEW MEXICO. By E. McCormick. Min. & Sci. Press, vol. 98, p. 328. 1½ columns.
- LEAD IN TURKEY. Min. & Sci. Press, vol. 98, p. 823. 1 column.

- THE GEOLOGY OF THE UPPER MISSISSIPPI LEAD REGION.** By J. V. Phillips. *Min. Mag.*, vol. 2, p. 129. 9½ pages. I.
- THE LEAD VEINS OF WISCONSIN.** *Min. Mag.*, vol. 2, p. 493. 11½ pages.
- ZINC AND LEAD IN ARKANSAS.** By L. L. Wittich. *M. & M.*, vol. 31, p. 10. 3 columns. Map.
- THE SILVER-LEAD-ZINC MINES AT BROKEN HILL, NEW SOUTH WALES.** By G. W. Williams. *E. & M. J.*, vol. 86, p. 793. 16½ columns. I.
- REMINISCENCES OF BROKEN HILL.** By J. Warten. *T. A. I. M. E.*, vol. 9, p. 1. 23 pages. I.
- RECENT DEVELOPMENTS ON IRON HILL, LEADVILLE.** By G. O. Argall. *E. & M. J.*, vol. 89, p. 261. 16 columns. I.
- LEAD AND ZINC MINING IN IOWA.** *E. & M. J.*, vol. 86, p. 805. 1 column.
- OSARK LEAD- AND ZINC-DEPOSITS: Their Genesis, Localization, and Migration.** Discussion of Paper of C. R. Keyes, vol. 40, p. 184. *T. A. I. M. E.*, vol. 40, p. 856. 5½ pages.
- LEAD AND ZINC ORES IN MISSOURI.** By J. R. Finlay. *E. & M. J.*, vol. 86, p. 605. 15½ columns. I.
- THE ORE DEPOSITS OF THE JOPLIN REGION, MISSOURI.** By F. L. Clerc. *T. A. I. M. E.*, vol. 38, p. 320. 23 pages.
- ZINC AND LEAD DEPOSITS OF SOUTHWESTERN MISSOURI.** By F. L. Garrison. *Min. & Sci. Press*, vol. 96, p. 291, 7 columns, I, p. 325. 7½ columns, I.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** *M. & M.*, vol. 31, p. 327. 3 columns.
- JOPLIN DISTRICT ZINC AND LEAD ORES.** By L. L. Wittich. *M. & M.*, vol. 31, p. 31. 1½ columns.
- TRES HERMANAS MINING DISTRICT, NEW MEXICO.** By W. Lindgren. *Min. & Sci. Press*, vol. 100, p. 491. 2 columns.
- THE TRES HERMANAS MINING DISTRICT, NEW MEXICO.** By W. Lindgren. *U. S. G. S., Bull. 380*, p. 123. 5 pages. 1908.
- MINERAL RESOURCES OF NORTHEASTERN OKLAHOMA.** By C. E. Sieben-thal. *U. S. G. S., Bull. 340*, p. 187. 42 pages. I. 1907.
- OKLAHOMA'S NEW ZINC-LEAD DISTRICT.** *E. & M. J.*, vol. 87, p. 496. 2½ columns.
- MIAMI LEAD AND ZINC DISTRICT IN OKLAHOMA.** By O. Ruhl. *E. & M. J.*, vol. 86, p. 910. 8 columns. I.
- LEAD AND ZINC ORES OF VIRGINIA.** By M. M. Caldwell. *M. & M.*, vol. 30, p. 269. 2 columns.
- THE ZINC DEPOSITS OF MOHAVE COUNTY, ARIZONA.** *E. & M. J.*, vol. 89, p. 775. 2½ columns.
- THE ZINC ORES OF LA MALLIEUE (BELGIUM).** By H. De Raauw. *T. A. I. M. E.*, vol. 37, p. 651. 1½ pages.
- LEADVILLE, COLORADO, ZINC DEPOSITS.** By H. E. Burton. *M. & M.*, vol. 31, p. 436. 2 columns.
- ZINC MINING IN CHIHUAHUA, MEXICO.** By W. H. Seamon. *E. & M. J.*, vol. 90, p. 679. 1½ columns.
- DEL CARMEN ZINC MINE, MEXICO.** *M. & M.*, vol. 31, p. 437. 4½ columns. I.
- BOQUILLAS ZINC DEPOSITS, MEXICO.** By C. Mour. *M. & M.*, vol. 31, p. 479. 1½ columns. I.
- THE MINING OF OXIDIZED ZINC ORES.** By L. L. Wittich. *M. & M.*, vol. 30, p. 276. 2 columns. I.
- MIGRATIONS OF THE JOPLIN ZINC BELT.** By C. R. Keyes. *E. & M. J.*, vol. 87, p. 1049. 2½ columns. I.
- ZINC MINING IN BUTTE, MONTANA.** *E. & M. J.*, vol. 87, p. 912. 1 column.
- ZINC MINING AT YELLOW PINE, NEVADA.** By N. B. Gregory. *M. & M.*, vol. 31, p. 340. 2½ columns. I.

- THE TYNTICHA ZINC MINE, SIBERIA**
By C. W. Purington Min & Sci. Press, vol. 99, p. 200. 1½ columns.
- THE EAST TENNESSEE ZINC MINING DISTRICT** By S. W. Osgood E & M J., vol. 87, p. 401. 9½ columns I.
- CHARACTER OF ORE IN THE EAST TENNESSEE ZINC DISTRICT.** E & M J., vol. 87, p. 402 ½ column
- GEOGRAPHIC DISTRIBUTION OF LEAD AND ZINC DEPOSITS OF THE MISSISSIPPI VALLEY** By C R. Keyes. E & M. J., vol. 86, p. 1004 3 columns.
- IRON AND ZINC IN SOUTHWESTERN VIRGINIA.** E & M. J., vol. 86, p. 908 3 columns. I
- THE EMPIRE-ENTERPRISE ZINC MINES, WISCONSIN.** By H C. George. E & M. J., vol. 89, p. 1280. 6½ columns. I.
- See also **THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES**
- See also **THEORY OF ORE DEPOSITS.**
- See also **MISCELLANEOUS PRODUCTION**
- A MANGANESE DEPOSIT IN SOUTHERN INDIA** By R O. Ahles. T. I M. & M., vol. 18, p. 133. 20 pages. I.
- MANGANESE DEPOSITS IN SOUTHERN INDIA** E & M J., vol. 87, p. 955 2½ columns
- MANGANESE MINING IN THE CAUCASUS** By A. Muls Min Mag, London, vol. 2, p. 439. 4 columns. I.
- MANGANESE DEPOSITS OF THE UNITED STATES.** By E C. Harder. U. S. G. S., Bull. 380, p. 255. 22 pages. I. 1908
- MANGANESE DEPOSITS OF THE UNITED STATES, WITH SECTIONS ON FOREIGN DEPOSITS, CHEMISTRY AND USES.** By E C. Harder U S G. S., Bull. 427 208 pages I
- See also **MISCELLANEOUS DISTRICTS**
- MANGANESE DEPOSITS OF VIRGINIA.** By S M. Ball E & M. J., vol. 87, p. 1056 1½ columns
- MANGANESE DEPOSITS OF THE BLUE RIDGE, VIRGINIA.** By L G. Lockey. E. & M. J., vol. 89, p. 867. 1 column.
- See also **THEORY OF ORE DEPOSITS.**

Occurrence of Manganese

- MANGANESE ORE IN UNUSUAL FORM.**
By W P Blake T. A I M E, vol. 41, p. 647. 2½ pages
- USES OF MANGANESE.** By E. C. Harder. U. S G S, Bull. 427. 208 pages.
- See also **UNITED STATES.**
- MANGANESE DEPOSITS OF MORRO DA MINA, BRAZIL** By J. Lustosa and J C. Branner. E & M. J., vol. 86, p. 1196. 5½ columns. I.
- MAGNESITE DEPOSITS OF CALIFORNIA.** By F. L. Hess U. S G. S., Bull. 355. 67 pages I 1908.
- MAGNESITE IN CALIFORNIA.** E. & M. J., vol. 87, p. 292. ½ column.
- SOME MAGNESITE DEPOSITS OF CALIFORNIA** By F. L. Hess. U S. G. S., Bull. 285, p. 385. 8 pages. 1905.

Miscellaneous Materials

- NONMETALLIFEROUS MINERAL RESOURCES OF SOUTHEASTERN ALASKA.** By C. W. Wright. U. S. G S., Bull. 314, p. 73. 8 pages. 1906
- METALLIC SULPHIDES IN ALLUVIAL GOLD DEPOSITS.** By F L. Garrison. Min. & Sci Press, vol. 101, p. 812. 2 columns.
- RADIUM IN AUSTRALIA.** By J. Plummer Min. & Sci. Press, vol. 100, p. 292 1½ columns.
- MARINE FIBER DEPOSITS OF SOUTH AUSTRALIA.** By H. L. Jene E. & M. J., vol. 88, p. 965. 2 columns I.
- SODIUM SULPHATE IN SAN LUIS OBISPO COUNTY, CALIFORNIA.** By R. Arnold and H. R. Johnson. Min & Sci Press, vol. 99, p. 855. 1½ columns.

SODIUM SULPHATE IN SODA LAKE, CARRISO PLAIN, SAN LUIS OBISPO COUNTY, CALIFORNIA. By R. Arnold and H. R. Johnson. U. S. G. S., Bull. 380, p. 369 3 pages. 1908

TRIPOLI DEPOSITS OF CALIFORNIA. Min. & Sci. Press, vol. 95, p. 54. $\frac{1}{2}$ column.

TRIPOLI DEPOSITS NEAR SENECA, MISSOURI. By C. E. Siebenthal and R. D. Mesler. U. S. G. S., Bull. 340, p. 429. 10 pages. I. 1907.

TOURMALINE IN CALIFORNIA. By J. L. Cowan. Min. & Sci. Press, vol. 100, p. 864. 4 columns.

PERIDOTITE OF ELLIOTT COUNTY, KENTUCKY. By J. S. Diller. U. S. G. S., Bull. 38. 31 pages. I. 1887.

MEERSCHAUM IN NEW MEXICO By D. B. Sterrett U. S. G. S., Bull. 340, p. 466 6 pages. 1907

LIMESTONE AND DOLOMITE IN THE BIRMINGHAM DISTRICT, ALABAMA. By C. Butts. U. S. G. S., Bull. 315, p. 247. 9 pages. 1906.

THE NIOHARA LIMESTONE OF NORTHERN COLORADO AS A POSSIBLE SOURCE OF PORTLAND CEMENT MATERIAL By G. C. Martin. U. S. G. S., Bull. 380, p. 314. 13 pages. I. 1908.

THE MARLS OF NEW JERSEY. By G. H. Cook. Min. Mag., vol. 5, p. 132. 14 pages.

LITHOGRAPHIC STONE. By S. J. Kubel. U. S. G. S., Mineral Resources, 1900. 4 pages.

GANISTER IN BLAIR COUNTY, PENNSYLVANIA. By C. Butts U. S. G. S., Bull. 380, p. 337. 5 pages. 1908.

GRAVEL AND SAND IN THE PITTSBURG DISTRICT, PENNSYLVANIA. By E. W. Shaw. U. S. G. S., Bull. 439, p. 388. 12 pages. I. 1909.

THE BEREA OIL SAND IN FLUSHING QUADRANGLE, OHIO. By W. T. Griswold. U. S. G. S., Bull. 346, 30 pages. I. 1908.

THE BEREA GRIT OIL SAND IN THE CADIZ QUADRANGLE, OHIO. By W. T. Griswold. U. S. G. S., Bull. 198, 43 pages. I. 1902

THE LIME INDUSTRY OF KNOX COUNTY, MAINE. By E. S. Bastin. U. S. G. S., Bull. 285, p. 393. 8 pages. I. 1905.

SAND-LIME BRICKMAKING NEAR BIRMINGHAM, ALABAMA By C. Butts. U. S. G. S., Bull. 315, p. 256 2 pages. 1906.

TALC AND SOAPSTONE IN VERMONT. By G. H. Perkins. E. & M. J., vol. 86, p. 753. $2\frac{1}{2}$ columns.

Occurrence of Rare Metals

RARE EARTHS: Their Occurrence and Use By C. Bogenrieder. T. Au. I. M. E., vol. 13, p. 87 28 pages

THE RARE METALS. Beryllium By C. Baskerville E. & M. J., vol. 86, p. 907 $2\frac{1}{2}$ columns

MINERALS OF THE RARE-EARTH METALS AT BARINGER HILL, LLANO COUNTY, TEXAS By F. L. Hess. U. S. G. S., Bull. 340, p. 286 8 pages. 1907.

BORON: Its Occurrence and Uses. By E. B. Wilson. M. & M., vol. 30, p. 168. $4\frac{1}{2}$ columns.

THE RARE METALS: Columbium By C. Baskerville. E. & M. J., vol. 86, p. 960. $2\frac{1}{2}$ columns

CARNOTITE IN RIO BLANCO COUNTY, COLORADO. By H. S. Gale. U. S. G. S., Bull. 315, p. 110. 8 pages. I. 1906.

CARNOTITE AND ASSOCIATED MINERALS IN WESTERN ROUTT COUNTY, COLORADO. By H. S. Gale. U. S. G. S., Bull. 340, p. 257. 6 pages. 1907.

LITHIUM AND ITS SOURCES. By F. L. Hess. Min. & Sci. Press, vol. 100, p. 822. 5 columns.

THE RARE METALS: Molybdenum. By C. Baskerville. E. & M. J., vol. 86, p. 1055. $2\frac{1}{2}$ columns.

SOME MOLYBDENUM DEPOSITS OF MAINE, UTAH, AND CALIFORNIA By F. L. Hess. U. S. G. S., Bull. 340, p. 231. 10 pages. 1907

SOME OCCURRENCES OF MOLYBDENITE IN THE SANTA RITA AND PATAGONIA MOUNTAINS, ARIZONA By F. C. Schrader and J. M. Hill. U. S. G. S., Bull. 430, p. 154. 10 pages. I. 1909.

THE RARE METALS Tantalum. By C. Baskerville. E. & M. J., vol. 86, p. 1110. 2½ columns

TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. U. S. G. S., Bull. 380, p. 131. 32 pages. I. 1908.

THE RARE METALS Thorium By C. Baskerville. E. & M. J., vol. 86, p. 1241. 4 columns.

THE THORIUM NITRATE INDUSTRY M. & M., vol. 30, p. 768. 1½ columns

THE RARE METALS: Titanium By C. Baskerville. E. & M. J., vol. 87, p. 10. 4 columns.

RARE METALS: Uranium By C. Baskerville. E. & M. J., vol. 87, p. 257. 4 columns.

RARE METALS: Vanadium. By C. Baskerville. E. & M. J., vol. 87, p. 518. 3 columns

THE PRESENT SOURCE AND USES OF VANADIUM. By J. K. Smith. T. A. I. M. E., vol. 38, p. 698. 6 pages.

COLORADO'S RARE METAL INDUSTRY By H. Fleck. M. & M., vol. 30, p. 63. 3½ columns.

OCCURRENCE OF VANADIUM NEAR TELLURIDE, COLORADO By E. R. Zolinski. E. & M. J., vol. 85, p. 1152. 4 columns. I.

VANADIUM IN PERU. By S. Jochamowitz. E. & M. J., vol. 87, p. 996. ½ column.

VANADIUM DEPOSITS IN PERU. By D. F. Hewett. Min. & Sci. Press, vol. 98, p. 619. 5½ columns.

Occurrence of Mica

MICA: Its Characteristics and Commerce. E. & M. J., vol. 87, p. 941. 3 columns

THE MICA INDUSTRY IN CANADA By F. Cirkel. E. & M. J., vol. 85, p. 801. 3½ columns. I

MICA DEPOSITS OF WESTERN NORTH CAROLINA. By D. B. Sterrett. U. S. G. S., Bull. 315, p. 400. 22 pages. I. 1906

MICA DEPOSITS OF NORTH CAROLINA By D. B. Sterrett. U. S. G. S., Bull. 430, p. 593. 48 pages. I. 1909

MICA DEPOSITS OF SOUTH DAKOTA. By D. B. Sterrett. U. S. G. S., Bull. 380, p. 382. 3 pages. 1908

MICA DEPOSITS IN SOUTH DAKOTA. By D. B. Sterrett. Min. & Sci. Press, vol. 99, p. 826. 4 columns. I

MICA IN THE HARTVILLE UPLIFT, WYOMING By S. H. Ball. U. S. G. S., Bull. 315, p. 423. 3 pages. 1906

See also **THEORY OF ORE DEPOSITS.**

Occurrence of Monazite

AN OCCURRENCE OF MONAZITE IN NORTHERN IDAHO. By F. C. Schrader. U. S. G. S., Bull. 430, p. 184. 7 pages. I. 1909

MONAZITE DEPOSITS OF THE CAROLINAS. By D. B. Sterrett. U. S. G. S., Bull. 340, p. 272. 14 pages. I. 1907.

MONAZITE AND MONAZITE MINING IN THE CAROLINAS. By J. H. Pratt and D. B. Sterrett. T. A. I. M. E., vol. 40, p. 313. 28 pages. I.

Occurrence of Natural Gas

NATURAL GAS. By J. D. Weeks. U. S. G. S., Mineral Resources, 1886, vol. 8.

NATURAL GAS. P. E. Soc. W. Pa., vol. 2, p. 331, 27½ pages; p. 401. 10 pages.

THE BOTTINEAN GAS FIELD, NORTH DAKOTA. By J. G. Barry E & M. J., vol. 87, p. 1089. 3 columns.

NATURAL GAS FIELD OF INDIANA By A. J. Phinney. U. S. G. S., 16th Ann. Rept., pt. 1, pp 579-742. 1889-90 I.

PETROLEUM AND NATURAL GAS IN THE PHILIPPINES By W. D. Smith. E. & M. J., vol. 88, p. 1285 1½ columns.

GAS FIELDS OF THE BIGHORN BASIN WYOMING. By C. W. Washburne. U. S. G. S., Bull. 340, p. 348. 16 pages. I. 1907

Occurrence of Nickel

NICKEL ORE IN NEVADA. E. & M. J., vol. 86, p. 23. ½ column.

NICKEL-COPPER-PLATINUM ORE IN NEVADA By A. M. Thompson. E. & M. J., vol. 86, p. 72 ½ column.

NICKEL DEPOSITS OF NICKEL MOUNTAIN, OREGON. By G. F. Kay. U. S. G. S., Bull. 315, p. 120. 8 pages. 1906.

THE OCCURRENCE OF NICKEL IN VIRGINIA. By T. L. Watson T. A. I. M. E., vol. 38, p. 683. 16 pages. I.

NICKEL IN SOME VIRGINIA IRON-ORES. T. A. I. M. E., vol. 39, p. 547. 2 pages.

See also **THEORY OF ORE DEPOSITS.**

Ocher Deposits

OCHE DEPOSITS OF EASTERN PENNSYLVANIA. By J. C. Stoddard and A. C. Callen. U. S. G. S., Bull. 430, p. 424. 15 pages I 1909

THE MINERAL-POINT ORES OF LEHIGH GAP, PENNSYLVANIA. By E. C. Eckel. U. S. G. S., Bull. 315, p. 435. 3 pages. 1906.

PAINT-ORE DEPOSITS NEAR LEHIGH GAP, PENNSYLVANIA. By F. T. Agthe and J. L. Dynan. U. S. G. S., Bull. 430, p. 440. 14 pages. I. 1909.

Occurrence of Onyx, Sapphire, Emerald, Ruby, Turquoise, Etc.

THE RUBY. By M. R. Ward. M. & M., vol. 31, p. 319. 3½ columns. I.

THE TURQUOISE MINING DISTRICT, ARIZONA. By J. M. Platt. E & M J., vol. 87, p. 213. 1½ columns.

GEYSERITE: A Variety of Opal, in Germany. E & M. J., vol. 90, p. 820. 1 column I

THE GREATEST GEM MINE IN THE WORLD. P. C. M. & M. Soc. S. A., vol. 7, p. 99. ½ column

GEMS IN NEW SOUTH WALES AND QUEENSLAND By F. S. Mance. E. & M J., vol. 86, p. 115 ½ column.

SOME NOTES ON THE WHITE CLIFFS OPAL FIELDS, WILCANNIA, NEW SOUTH WALES. By F. G. de v Gipps. T. Au. I. M. E., vol. 2, p. 70, 6 pages; p. 76, 5 pages. I.

RUBY MINES OF THE MOGOK VALLEY BURMA. Min. & Sci. Press, vol. 99, p. 231. 1½ columns

GENESIS AND CLASSIFICATION OF MEXICAN ONYX. By E. M. Lawton. Min. & Sci. Press, vol. 100, p. 791. 1½ columns.

MONTANA SAPPHIRES. M. & M., vol. 29, p. 199. ½ column.

SAPPHIRE IN MONTANA. Min. & Sci. Press, vol. 95, p. 433. ½ column

TURQUOISE MINING, BURRO MOUNTAINS, NEW MEXICO By E. R. Zahinski E. & M. J., vol. 86, p. 843. 10 columns. I.

AMATRICE, A NEW GEM STONE OF UTAH By E. R. Zahinski. E. & M. J., vol. 87, p. 1038. 6 columns.

Occurrence of Peat

THE UTILIZATION OF PEAT FOR INDUSTRIAL AND METALLURGICAL PURPOSES. By E. Nystrom. J. C. M. I., vol. 11, p. 231. 5 pages.

THE POSSIBLE USE OF PEAT FUEL IN ALASKA. By C. A. Davis. U. S.

- G. S., Bull. 379, p 63 4 pages. 1908.
- THE PREPARATION AND USE OF PEAT AS FUEL IN ALASKA By C. A. Davis U. S. G. S., Bull. 442, p 101 32 pages 1909.
- See also the UNITED STATES.
- PEAT IN CANADA E. & M. J., vol 88, p 361. 2 columns
- THE PEAT FUEL INDUSTRY OF CANADA. E. & M. J., vol 87, p 905 1 column.
- PEAT BEDS IN INDIANA E & M. J., vol 88, p 789. $\frac{1}{2}$ column
- PEAT DEPOSITS OF MAINE By E. S. Bastin and C. A. Davis U. S. G. S., Bull 376 127 pages. I 1909
- PEAT By H. H. Hindshaw. U S G S, Mineral Resources, 1904
- PEAT DEPOSITS By N. S. Shaler. U. S. G. S., 16th Ann Rept, pt. 4 9 pages.
- Occurrence of Petroleum**
- PETROLEUM: Occurrence and Use By Max Livingston. P. E. Soc. W. Pa., vol. 2, p. 193. 14 columns.
- THE OIL SHALES OF THE MARITIME PROVINCES. By R. W. Ellis J M Soc. N. S., vol 14, p. 1. 12 $\frac{1}{2}$ pages.
- ECONOMIC POSSIBILITIES OF AMERICAN OIL SHALES. By C. Baskerville E. & M. J., vol. 88, p. 149, 15 $\frac{1}{2}$ columns, I.; p. 195, 13 $\frac{1}{2}$ columns, I.
- OCCURRENCE OF OIL AND GAS. By W. Forester. Min. & Sci. Press, vol. 101, p. 634. 8 $\frac{1}{2}$ columns. I.
- CLASSIFICATION OF PETROLEUM AND NATURAL GAS FIELDS BASED ON STRUCTURE. By F. G. Clapp Min. & Sci. Press, vol. 101, p. 80. $\frac{1}{2}$ column
- S. PEARSON AND SON'S UNCONTROLLABLE OIL GUSHER E & M. J., vol. 87, p. 7. 9 columns. I.
- THE USE OF GEOLOGICAL SCIENCE IN THE PETROLEUM AND NATURAL GAS BUSINESS. By F. G. Clapp. P. E. Soc W Pa., vol 26, p 87. 34 pages. I.
- OILS OF WEST AFRICA. E & M J., vol. 87, p 1037 3 columns.
- NOTES ON THE PETROLEUM FIELDS OF ALASKA. By G C Martin U S. G S, Bull 259, p. 128 11 $\frac{1}{2}$ pages. I.
- PETROLEUM AT CONTROLLER BAY. By G C Martin. U. S. G. S., Bull. 314, p. 89 35 pages I. 1906
- THE PETROLEUM FIELDS OF THE PACIFIC COAST OF ALASKA, WITH AN ACCOUNT OF THE BERING RIVER COAL DEPOSITS By G C. Martin. U S G S, Bull 250. 64 pages. I. 1905
- KATALLA, ALASKA, OIL FIELD By W T. Prosser M. & M., vol. 31, p 731. 1 $\frac{1}{2}$ columns.
- THE AUSTRALIAN OIL SHALE INDUSTRY. E & M J, vol. 87, p. 1051. 1 $\frac{1}{2}$ columns.
- OIL SHALE DEPOSITS, BLUE MOUNTAINS, NEW SOUTH WALES By H. L. Jene. E. & M. J., vol 90, p 407. 4 $\frac{1}{2}$ columns. D.
- OIL RESOURCES OF CALIFORNIA By M L Requa. Min Mag. London, vol 4, p 47. 10 $\frac{1}{2}$ columns. Map.
- OIL INDUSTRY IN CALIFORNIA IN 1909. Min. & Sci. Press, vol. 100, p. 97. 5 columns I.
- PETROLEUM DEVELOPMENT IN SAN JOAQUIN VALLEY. E & M J., vol. 89, p 964. 7 columns.
- THE CALIFORNIA OIL INDUSTRY. By C. De Kalb. Min & Sci Press, vol. 100, p. 857. 5 $\frac{1}{2}$ columns
- GEOLOGY OF THE COALINGA DISTRICT, CALIFORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 398. 354 pages. I. 1910.
- PRELIMINARY REPORT ON THE COALINGA OIL DISTRICT IN FRESNO AND KINGS COUNTIES, CALIFORNIA By R. Arnold and R. Anderson. U. S. G. S., Bull. 357. 142 pages. I. 1908.

- OIL MEASURES IN THE COALINGA DISTRICT, CALIFORNIA. By W. Forstner. Min. & Sci. Press, vol. 98, p. 386. 3½ columns
- GEOLOGY AND OIL RESOURCES OF THE SANTA MARIA OIL DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA. By R. Arnold and R. Anderson. U. S. G. S., Bull. 322 161 pages. I. 1907.
- GEOLOGY AND OIL RESOURCES OF THE SUMMERLAND DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 321 91 pages. I. 1907.
- PRELIMINARY REPORT ON MCKITTRICK-SUNSET OIL REGION, CALIFORNIA. By R. Arnold and H. R. Johnson. U. S. G. S., Bull. 406. 225 pages. I. 1910
- THE SALT LAKE OIL FIELD NEAR LOS ANGELES, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 285, p. 357. 5 pages. I. 1905.
- THE MINER RANCH OIL FIELD, CONTRA COSTA COUNTY, CALIFORNIA. By R. Arnold. U. S. G. S., Bull. 340, p. 339. 4 pages 1907.
- LAKE VIEW GUSHER: A Large Oil Well in Midway Field, California. Min. & Sci. Press, vol. 100, p. 925. 2 columns. I.
- THE LOS ANGELES OIL INDUSTRY. By P. E. Barbour. E. & M. J., vol. 88, p. 365. 5 columns
- THE TILBURY AND ROMNEY OIL FIELDS IN ONTARIO. E. & M. J., vol. 85, p. 363. 1 column.
- THE COMMERCIAL VALUE OF THE OIL SHALES OF EASTERN CANADA, BASED ON THEIR CONTENTS, BY ANALYSIS IN CRUDE OIL AND AMMONIUM SULPHATE. By R. W. Ellis. J. M. Soc. N. S., vol. 15, p. 29. 28 pages.
- THE NEW TILBURY AND ROMNEY OIL FIELDS OF KENT COUNTY, ONTARIO. By E. Coste. J. C. M. I., vol. 10, p. 77. 8 pages.
- THE FLORENCE OIL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 381, p. 517. 28 pages. I. 1908.
- THE DEVELOPMENT IN THE BOULDER OIL FIELD, COLORADO. By C. W. Washburne. U. S. G. S., Bull. 381, p. 514. 2½ pages. 1908.
- GEOLOGY OF THE RANGEL OIL DISTRICT, COLORADO, WITH A SECTION ON THE WATER SUPPLY. By H. S. Gale. U. S. G. S., Bull. 350. 60 pages. I. 1908.
- OIL-SHALE AT PUMPHERSTON, SCOTLAND. By W. Caldwell. T. I. M. E., vol. 36, p. 581. 9½ pages. I.
- THE PUMPHERSTON, SEAFIELD, AND DEANS WORKS OF THE PUMPHERSTON OIL COMPANY. T. I. M. E., vol. 36, p. 602. 8 pages.
- PETROLEUM FIELDS OF ILLINOIS. By H. F. Bain. Min. & Sci. Press, vol. 99, p. 153. 4½ columns. I.
- PUMPING AND SHIPPING OIL IN EASTERN ILLINOIS. By R. S. Blatchley. Min. & Sci. Press, vol. 99, p. 678. 6 columns. I.
- PETROLEUM IN BURMA. By E. A. Wakefield. Min. & Sci. Press, vol. 99, p. 500 1½ columns.
- THE TRENTON LIMESTONE AS A SOURCE OF PETROLEUM AND INFLAMMABLE GAS IN OHIO AND INDIANA. By E. Orton. U. S. G. S., 8th Ann Rept., pt. 2, pp. 475-662. 1886-87 I
- OIL AND GAS IN LOUISIANA, WITH A BRIEF SUMMARY OF THEIR OCCURRENCE IN ADJACENT STATES. By G. D. Harris. U. S. G. S., Bull. 429. 192 pages. I. 1910.
- MEXICAN OILFIELDS. E. & M. J., vol. 87, p. 1233. 1 column.
- OIL DEVELOPMENTS IN MEXICO. E. & M. J., vol. 88, p. 660 1½ columns
- THE OIL FIELDS OF MEXICO. By H. S. Denny. Min. Mag., London, vol. 3, p. 36. 8 columns. Map.
- OIL IN MEXICO. By J. L. Mennell. Min. Mag., London, vol. 2, p. 448. 5 columns. Map.

- OIL IN MEXICO.** By A. R. Skertchly. Min. Mag., London, vol. 3, p. 283 6 columns. I
- OIL IN THE STATE OF VERA CRUZ, MEXICO.** By E. Ordoñez. Min. & Sci. Press, vol. 95, p. 247. 3½ columns. I.
- OIL PROSPECTS IN NEVADA.** Min. & Sci. Press, vol. 97, p. 817 2 columns.
- TWO AREAS OF OIL PROSPECTING IN LYON COUNTY, WESTERN NEVADA.** By R. Anderson. U. S. G. S., Bull. 381, p. 490. 3 pages. 1908.
- ALLEGED OIL PROSPECTS IN NEVADA.** M. & M., vol. 29, p. 335. 1½ columns.
- GEOLOGY AND OIL PROSPECTS OF THE RENO REGION, NEVADA.** By R. Anderson. U. S. G. S., Bull. 381, p. 475. 15 pages. 1908
- ANALYSES OF CRUDE PETROLEUM FROM OKLAHOMA AND KANSAS** By D. T. Day. U. S. G. S., Bull. 381, p. 494. 10 pages. 1908.
- THE MADILL OIL POOL, OKLAHOMA.** By J. A. Taff and W. J. Reed. U. S. G. S., Bull. 381, p. 504 12 pages I. 1908.
- THE MALHEUR OILFIELDS OF OREGON.** E. & M. J., vol. 88, p. 512. ½ column.
- THE NINEVEH AND GORDON OIL SANDS IN WESTERN GREENE COUNTY, PENNSYLVANIA.** By F. G. Clapp U. S. G. S., Bull. 285, p. 362 4½ pages. 1905.
- RECENT PROGRESS AT MAIKOP: A Russian Oil Field.** By T. J. Hoover. Min. Mag., London, vol. 4, p. 298. 3 columns. I.
- PROBLEMS OF THE RUSSIAN OIL INDUSTRY.** By F. Richards. E. & M. J., vol. 88, p. 69. 4 columns.
- RUSSIAN PETROLEUM.** M. & M., vol. 30, p. 655. 3 columns.
- OILFIELDS OF SAKHALIN.** By C. E. Pfaffius. Min. Mag., London, vol. 3, p. 447. 2 columns.
- MAIKOP OIL-FIELD.** By A. B. Thompson. Min. Mag., London, vol. 2, p. 277. 7½ columns. I.
- OIL INDUSTRY OF THE UNITED STATES.** Min. & Sci. Press, vol. 96, p. 202. 5½ columns
- THE PETROLEUM FIELDS OF THE UNITED STATES.** By W. G. Burroughs. E. & M. J., vol. 89, p. 921. 11 columns. I.
- PETROLEUM IN SOUTHERN UTAH.** By G. B. Richardson. U. S. G. S., Bull. 340, p. 343. 5 pages 1907.
- THE NEW OILFIELD IN UTAH** By A. P. Rogers. E. & M. J., vol. 87, p. 989. 2½ columns. I
- PETROLEUM IN VENEZUELA.** E. & M. J., vol. 90, p. 506. 1½ columns.
- PETROLEUM INDUSTRY, VENEZUELA.** M. & M., vol. 31, p. 158. 1½ columns.
- WEST VIRGINIA OIL AND GAS NOTES.** E. & M. J., vol. 90, p. 823. 4½ columns.
- OIL FIELD AT FOLLANSBEE, WEST VIRGINIA.** By F. W. Brady. M. & M., vol. 29, p. 207. 4½ columns. I.
- NOTES FROM THE OIL FIELDS** By F. W. Brady. M. & M., vol. 30, p. 156. 3½ columns. I.
- THE LABARGE OIL FIELD, CENTRAL UTAH COUNTY, WYOMING.** By A. R. Schultz. U. S. G. S., Bull. 340, p. 364. 9 pages. I. 1907.
- See also **THEORY OF ORE DEPOSITS AND GEOLOGY OF FUELS AND ORES.**
- See also **MISCELLANEOUS PRODUCTION.**

Occurrence of Phosphates

- PHOSPHATE CLAIMS ON PUBLIC LANDS.** Min. & Sci. Press, vol. 98, p. 862. 4½ columns.
- See also **UNITED STATES.**
- PHOSPHATE DEPOSITS OF OCEAN AND PLEASANT ISLANDS.** By F. D. POWERS. T. A. I. M. E., vol. 10, p. 213. 20 pages. I.

INVESTIGATION ON THE ROCK GUANO FROM THE ISLANDS OF THE CARIBBEAN SEA By W. J. Taylor. Min. Mag., vol. 8, p. 438 11 pages.

PHOSPHATES IN TUNIS. E. & M. J., vol. 88, p. 177. 1½ columns.

DEVELOPED PHOSPHATE DEPOSITS OF NORTHERN ARKANSAS. By A. H. Purdue. U. S. G. S., Bull. 315, p. 463 11 pages. 1906.

THE CLARENDON PHOSPHATE DEPOSIT, NEAR DUNEDIN, NEW ZEALAND. By A. Andrew. T. A. I. M. E., vol. 11, p. 177. 20 pages. I

PHOSPHATE MINING IN BELGIUM T. I. M. E., vol. 37, p. 683. 2½ pages.

DEVELOPMENTS IN THE FLORIDA PHOSPHATE INDUSTRY. By C. G. Memminger E. & M. J., vol. 89, p. 184 3 columns.

PRODUCTION OF PHOSPHATE ROCK IN FLORIDA DURING 1908 By E. H. Sellards E. & M. J., vol. 88, p. 129. 1½ columns

PHOSPHATE MINING IN FLORIDA E. & M. J., vol. 85, p. 597. 1 column.

PHOSPHOROUS ORE AT MOUNT HOLLY SPRINGS, PENNSYLVANIA By G. W. Stose U. S. G. S., Bull. 315, p. 474. 9 pages. 1906.

PHOSPHATE DEPOSITS IN THE PHILIPPINES. U. S. G. S., 21st Ann. Rept., pt. 3, 644 pages. 1899-1900. I.

CONDITION OF THE PHOSPHATE INDUSTRY IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 89, p. 180. 3 columns.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 153 3½ columns. I.

PHOSPHATE MINING IN TENNESSEE. By H. D. Ruhm. E. & M. J., vol. 85, p. 404. 2 columns.

PHOSPHATE MINING IN TENNESSEE By H. D. Ruhm. E. & M. J., vol. 85, p. 573. 2 columns.

PHOSPHATE ROCK IN TENNESSEE. By H. D. Ruhm E. & M. J., vol. 85, p. 1150. 2½ columns.

PHOSPHATE DEPOSITS OF UNITED STATES By F. B. Van Horn. Min. & Sci. Press, vol. 99, p. 88 5 columns.

PHOSPHATE DEPOSITS IN WESTERN UNITED STATES By F. B. Weeks and W. F. Ferrier U. S. G. S., Bull. 315, p. 449 14 pages I 1906

PHOSPHATE DEPOSITS IN THE WESTERN UNITED STATES By F. B. Weeks. U. S. G. S., Bull. 340, p. 441. 6½ pages. 1907

See also MISCELLANEOUS DISTRICTS

PHOSPHATE DEPOSITS EAST OF OGDEN, UTAH. By E. Blackwelder U. S. G. S., Bull. 430, p. 536 15 pages. I 1909

PRELIMINARY REPORT ON THE PHOSPHATE DEPOSITS IN SOUTHEASTERN IDAHO AND ADJACENT PARTS OF WYOMING AND UTAH. By H. S. Gale and R. W. Richards U. S. G. S., Bull. 430, p. 457. 82 pages. I 1909.

See also THEORY OF ORE DEPOSITS

Occurrence of Platinum

PLATINUM By F. W. Horton. U. S. G. S., Mineral Resources, 1905 12 pages.

THE GEOLOGICAL RELATIONS AND DISTRIBUTION OF PLATINUM AND ASSOCIATED METALS. By J. F. Kemp U. S. G. S., Bull. 193. 95 pages I. 1902.

PLATINUM DEPOSITS IN BRITISH COLUMBIA J. C. M. I., vol. 13, p. 317. 2½ pages.

PLATINUM MINING IN THE TULAMEEN DISTRICT, BRITISH COLUMBIA. By C. Camsell. J. C. M. I., vol. 13, p. 309. 15 pages I Map

GEOLOGY OF THE PLATINUM DEPOSITS OF COLOMBIA. By J. C. Castillo. Min. & Sci. Press, vol. 98, p. 826. 3½ columns. I

PLATINUM IN SOUTHEASTERN NEVADA. By H. Bancroft. U. S. G. S., Bull. 430, p. 192. 7 pages. I. 1909.

PLATINUM IN SOUTHEASTERN NEVADA
By H C Bancroft Min & Sci
Press, vol 100, p 797 $\frac{1}{2}$ column

PLATINUM AT THE CRACKER JACK
MINE, DOUGLAS COUNTY, OREGON
By H B Pulsifer E & M J, vol.
86, p. 1003. $2\frac{1}{2}$ columns

RUSSIAN PLATINUM AND FOREIGN COM-
PANIES IN RUSSIA. By V. X. Prar-
dinsky E & M. J, vol. 89, p. 1025
 $5\frac{1}{2}$ columns

RUSSIAN PLATINUM DEVELOPMENTS.
M. & M, vol. 30, p 400 2 col-
umns

PLATINUM IN THE UNITED STATES. By
D. T. Day. Min & Sci. Press,
vol 100, p. 582 $\frac{1}{2}$ column

PLATINUM IN RAMBLER MINE, WYO-
MING. By J F. Kemp. U S G S.,
Mineral Resources, 1902 7 pages.

See also THEORY OF ORE DEPOSITS.

Occurrence of Quicksilver

RARE MERCURY ORES. By C. G.
Dennis Min. & Sci Press, vol. 95,
p 92. 1 column. I.

NOTES ON THE OCCURRENCE OF CINNA-
BAR IN CENTRAL WESTERN ARIZONA.
By H. Bancroft. U. S G S, Bull
430, p 151. 3 pages 1909

MERCURY MINES AT KONIAH, ASIA
MINOR By F. F. Sharpless. E &
M J, vol 86, p 602. $7\frac{1}{2}$ columns. I.

QUICKSILVER IN CALIFORNIA. Min.
& Sci. Press, vol 100, p. 15. $3\frac{1}{2}$
columns. Map.

MERCURY MINES OF NEW ALMADEN,
CALIFORNIA Min. Mag., vol. 10,
p 142 $2\frac{1}{2}$ pages.

DULCES NOMBRES QUICKSILVER DE-
POSIT, MEXICO. By P. A Babb.
E & M. J., vol. 88, p. 684. $7\frac{1}{2}$ col-
umns. I.

QUICKSILVER IN NEVADA. By W. C.
Davis. Min. & Sci. Press, vol 99,
p 663. $\frac{1}{2}$ column I.

QUICKSILVER AT HUANCAYETICA, PERU.
By L. W. Strauss Min. & Sci.
Press, vol 99, p. 561. $11\frac{1}{2}$ col-
umns I.

CINNABAR IN SPAIN Min Mag, vol
7, p 150. $4\frac{1}{2}$ pages.

CONDITION OF THE QUICKSILVER IN-
DUSTRY IN TEXAS By W B Phil-
lips. E & M. J, vol 88, p 1022.
8 columns.

MERCURY MINERALS FROM TERLINGUA,
TEXAS By W F Hillsbrand and
W T Schaller. U. S G. S, Bull.
405 174 pages I 1909

MERCURY IN TURKEY. Min. & Sci
Press, vol 98, p 826. 1 column.

QUICKSILVER PRODUCTION IN FOREIGN
COUNTRIES. By H. W. Turner.
Min. & Sci Press, vol. 100, p 16.
 $1\frac{1}{2}$ columns.

Occurrence of Rutile

THE VIRGINIA RUTILE DEPOSITS By
F. L Watson and S Taber. U. S.
G S, Bull. 430, p 200 14 pages I.
1909.

RUTILE DEPOSITS OF VIRGINIA. Min.
& Sci Press, vol. 98, p 896. $1\frac{1}{2}$ col-
umns.

Occurrence of Salt

THE SALINE DEPOSITS OF CARMEN
ISLANDS By E. H. Cook. E. &
M J, vol 85, p 545 $3\frac{1}{2}$ columns I.

DESTRUCTION OF THE SALT-WORKS OF
THE COLORADO DESERT BY THE
SALTON SEA. By W. P. Blake. T.
A. I M. E, vol. 38, p. 848. 1 page.

THE SALT MINING INDUSTRY IN THE
RUSSIAN EMPIRE. By F. Thiess.
T. I. M. E., vol. 37, p. 702 $1\frac{1}{2}$
pages.

SALT AND GYPSUM OF THE PRESTON
VALLEY OF THE HOLSTON RIVER,
VIRGINIA. By H. D. Rogers. Min
Mag., vol. 4, p. 28. 7 pages.

THE SALT RESOURCES OF THE IDAHO-
WYOMING BORDER, WITH NOTES ON
THE GEOLOGY. By C. L. Berger.
U. S. G. S., Bull. 430, p. 555. 15
pages. 1909.

DEPOSITS OF SODIUM SALTS IN WYOMING. By A. R. Schultz. U. S. G. S., Bull. 430, p. 570. 19 pages. I 1909.

Occurrence of Sulphur

A NEW SOURCE OF SUPPLY OF SULPHUR. T. A. I. M. E., vol. 39, p. 522 18 pages. I.

MAKUSHIN SULPHUR DEPOSITS, UNALASKA. By N. O. Lawton. Min. & Sci. Press, vol. 98, p. 258 4 columns. I.

SULPHUR MINING IN MEXICO. By E. F. White. M. & M., vol. 30, p. 75. 3½ columns. I.

THE SULPHUR DEPOSITS OF MAPIMI, MEXICO. By J. D. Villarello. T. I. M. E., vol. 37, p. 676 2 pages.

SULPHUR IN THE NEW HEBRIDES ISLANDS. E. & M. J., vol. 87, p. 958. ½ column.

A NEW SOURCE OF SUPPLY OF SULPHUR. T. A. I. M. E., vol. 39, p. 522. 18 pages. I.

THE COVE CREEK SULPHUR BEDS, UTAH. By W. T. Lee. U. S. G. S., Bull. 315, p. 485. 5 pages. 1906.

SULPHUR DEPOSITS NEAR THERMOPOLIS, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 380, p. 373. 8 pages. I. 1908.

SULPHUR DEPOSITS AT CODY, WYOMING. By E. G. Woodruff. U. S. G. S., Bull. 340, p. 451. 6 pages. I. 1907.

Occurrence of Silver, Cobalt, Etc.

SILVER: History and Mode of Occurrence. By T. F. Van Wagenen. Min. & Sci. Press, vol. 97, p. 392. 7½ columns.

A SILVER BEARING DIORITE IN SOUTHERN ARIZONA. By J. Bond. E. & M. J., vol. 89, p. 1268. 4 columns.

BROKEN HILL SILVER MINE. By E. C. Andrews. Min. & Sci. Press, vol. 98, p. 158. 2 columns.

ORE DEPOSITS OF THE PEAKS SILVER FIELD, NEW SOUTH WALES. By C. O. G. Larcombe. T. A. I. M. E., vol. 11, p. 128. 8 pages. I.

OCCURRENCE OF SILVER-LEAD ORES AT THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA. E. & M. J., vol. 89, p. 420. 1½ columns. I.

THE SILVER VEINS OF THE MONTREAL RIVER DISTRICT, CANADA. By A. E. Barlow. Min. & Sci. Press, vol. 97, p. 462. 6½ columns.

MINING AT COBALT. By F. C. Loring. E. & M. J., vol. 85, p. 905. 4 columns.

MINING AT COBALT. By F. C. Loring. J. C. M. I., vol. 11, p. 335. 5 pages.

OCCURRENCE OF THE COBALT-SILVER ORES OF NORTHERN ONTARIO. J. C. M. I., vol. 11, p. 275 12 pages.

THE COBALT MINING DISTRICT. By R. Bell. J. C. M. I., vol. 10, p. 62. 10 pages.

THE ORE DEPOSITS OF THE COBALT DISTRICT, ONTARIO, CANADA. By C. R. Van Hise. J. C. M. I., vol. 10, p. 45. 16 pages.

THE PROBABLE NUMBER OF PRODUCTIVE VEINS IN THE COBALT DISTRICT. By G. R. Mickle. J. C. M. I., vol. 13, p. 325. 12 pages.

THE PRESENT POSITION OF COBALT, CANADA. By H. P. Davis. E. & M. J., vol. 86, p. 855 5 columns. I.

THE COBALT SILVER DISTRICT, ONTARIO, CANADA. By W. B. Phillips. E. & M. J., vol. 86, p. 518. 2½ columns.

COBALT, ONTARIO, CANADA. By H. B. Smith. Min. & Sci. Press, vol. 96, p. 876. 5½ columns. I.

COBALT, ONTARIO, CANADA. By F. C. Loring. Min. & Sci. Press, vol. 95, p. 814. 2½ columns. I.

OPERATIONS IN THE COBALT DISTRICT, ONTARIO. By E. Higgins. E. & M. J., vol. 87, p. 1267. 14 columns. I.

THE COBALT DISTRICT IN 1909. By R. E. Hore. E. & M. J., vol. 89, p. 703. 4 columns. I.

- THE SOUTH LORRAINE SILVER DISTRICT, ONTARIO, CANADA. By W. B. Phillips. E. & M. J., vol. 87, p. 214. 4 columns.
- THE SILVER ISLET VEIN, LAKE SUPERIOR. By W. McDermott. T. I. M. & M., vol. 18, p. 220. 34½ pages.
- OCCURRENCE OF ORE IN SILVER ISLET MINE. T. I. M. & M., vol. 18, p. 222. 4 pages.
- SILVER-LEAD MINES OF BAWDWIN, SHAN STATES, CHINA. By T. D. La Touche and J. C. Brown. E. & M. J., vol. 88, p. 550. 16½ columns. I.
- SILVER-LEAD MINING IN FREIBERG, GERMANY. By W. G. Brown. E. & M. J., vol. 87, p. 987. 5½ columns.
- THE SILVER MINES OF MEXICO. By A. F. J. Bordeaux. T. A. I. M. E., vol. 39, p. 357. 11½ pages.
- THE MINERAL RESOURCES OF SONORA. By F. J. H. Merrill. Min. & Sci. Press, vol. 96, p. 33. 14 columns. I. Map.
- SAN JAVIER, AN OLD SILVER DISTRICT OF SONORA. By C. N. Nelson. E. & M. J., vol. 90, p. 660. 4 columns. Map.
- LAS CHISPAS MINES, SONORA, MEXICO. By B. E. Russell. E. & M. J., vol. 86, p. 1006. 6 columns. I.
- EL TIGRE MINE, MONTEZUMA DISTRICT, SONORA, MEXICO. By R. L. Herrick. M. & M., vol. 29, p. 483. 10 columns. I.
- ORES OF THE EL TIGRE MINE, SONORA, MEXICO. M. & M., vol. 29, p. 486. ½ column.
- THE PROMONTORIO SILVER MINE, DURANGO, MEXICO. By F. C. Lincoln. T. A. I. M. E., vol. 38, p. 734. 16 pages. I.
- LORETO MINE AND THE PINGUICO DISTRICT, GUANAJUATO, MEXICO. By C. W. Botsford. E. & M. J., vol. 88, p. 650. 2½ columns. I.
- THE ZACATECAS DISTRICT AND ITS RELATION TO GUANAJUATO AND OTHER CAMPS. By C. W. Botsford. E. & M. J., vol. 87, p. 1227. 4 columns. I.
- NOTES ON GUANAJUATO. By T. A. Rickard. Min. & Sci. Press, vol. 95, p. 83. 2½ columns. I.
- OPERATIONS OF GUANAJUATO DEVELOPMENT COMPANY. E. & M. J., vol. 88, p. 651. 10 columns. I.
- THE WORKING MINES OF GUANAJUATO. By C. T. Rice. E. & M. J., vol. 86, p. 806. 8 columns. I.
- HISTORY OF LA LUZ CAMP, GUANAJUATO, MEXICO. E. & M. J., vol. 88, p. 646. ¾ column.
- THE GUANAJUATO MINING DISTRICT, MEXICO. E. & M. J., vol. 90, p. 1310. 6 columns. I.
- GUANAJUATO, THE GREAT SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 669. 9½ columns. I.
- MINES OF AJUCHITLAN, QUERETARO, MEXICO. By S. J. Lewis. Min. & Sci. Press, vol. 100, p. 211. 8½ columns. I.
- THE MINES OF EL DOCTOR, MEXICO. By T. D. Murphy. Min. & Sci. Press, vol. 95, p. 241. 8½ columns. I.
- THE SILVER-LEAD MINES OF SANTA BARBARA, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 207. 12 columns. I.
- ORE OF THE SANTA BARBARA DISTRICT, MEXICO. E. & M. J., vol. 86, p. 208. 2 columns.
- LAS LAMENTOS MINE, CHIHUAHUA. E. & M. J., vol. 87, p. 489. 1 column.
- RECENT MINING DEVELOPMENTS IN CHIHUAHUA. By A. P. Rogers. E. & M. J., vol. 88, p. 681. 6½ columns. I.
- STORIES OF THE BATOPILAS MINES, CHIHUAHUA, MEXICO. By M. R. Lamb. E. & M. J., vol. 85, p. 689. 4½ columns. I.

- SANTA BARBARA MINE, CHIHUAHUA, MEXICO. M. & M., vol. 29, p. 369. 3 columns I.
- NATIVE SILVER IN SOUTHWESTERN CHIHUAHUA, MEXICO. By W. M. Brodie. E. & M. J., vol. 89, p. 664. 5½ columns. I.
- TRAVELING IN WESTERN CHIHUAHUA, MEXICO. By F. H. Morley. E. & M. J., vol. 87, p. 706. 8½ columns.
- MINING IN NORTHERN SINALOA, MEXICO. By E. A. H. Tays. Min. & Sci. Press, vol. 99, p. 120. 3½ columns. Map.
- THE ANTIQUA OF REAL DE SIVIRILJOA, SINALOA. By E. A. H. Tays. E. & M. J., vol. 90, p. 1155. 5½ columns. I.
- THE SILVER-MINES OF MEXICO. Discussion of Paper of A. F. J. Bordeaux, vol. 39, p. 357. T. A. I. M. E., vol. 40, p. 848. 5 pages.
- THE ZACUALPAN DISTRICT, MEXICO. By J. M. Platt. E. & M. J., vol. 88, p. 670. 4 columns. I.
- THE SILVER MINE OF "JESUS MARIA," IN NEW LEON, MEXICO. Min. Mag., vol. 1, p. 570, 11½ pages; p. 34, 14 pages.
- MINES OF PENOLES COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 309. 13½ columns. I.
- PACHUCA AND REAL DEL MONTO SILVER DISTRICT, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 519. 17 columns. I.
- SOME REMINISCENCES OF OLD DOLORES, MEXICO. By V. Pender. E. & M. J., vol. 89, p. 1329. 6 columns.
- DIENTE, MEXICO. By E. McCormick. Min. & Sci. Press, vol. 95, p. 648. 1 column.
- ZACATECAS, A FAMOUS SILVER CAMP OF MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 401. 15½ columns. I.
- THE SILVER OF THE LAKE SUPERIOR MINERAL REGION. Min. Mag., vol. 1, p. 447, 8 pages, p. 612, ½ page.
- THE CORBINE DISTRICT, JEFFERSON COUNTY, MONTANA. By F. Bushnell. E. & M. J., vol. 89, p. 1154. 5½ columns. I.
- THE SILVER-LEAD DEPOSITS OF EUREKA, NEVADA. E. & M. J., vol. 85, p. 123. 3 columns.
- THE COMSTOCK MINES TODAY. By W. Symmes. Min. & Sci. Press, vol. 99, p. 24. 4½ columns. I.
- PROGRESS ON THE COMSTOCK LODE. By R. L. Herrick. M. & M., vol. 29, p. 150. 10½ columns. I.
- THE GREAT COMSTOCK LODE. By G. McM. Ross. Min. & Sci. Press, vol. 95, p. 468. 4 columns.
- GEOLOGY AND MINERAL RESOURCES OF THE OSCEOLA MINING DISTRICT, WHITE PINE COUNTY, NEVADA. By F. B. Weeks. U. S. G. S., Bull. 340, p. 117. 18 pages. I. 1907.
- THE YELLOW PINE MINING DISTRICT OF NEVADA. By N. B. Gregory. E. & M. J., vol. 90, p. 1308. 5½ columns.
- NOTES ON THE PIOCHE MINING DISTRICT, NEVADA. By S. F. Shaw. E. & M. J., vol. 88, p. 545. 10½ columns. I.
- PIOCHE, NEVADA. By J. W. Abbott. Min. & Sci. Press, vol. 95, p. 176. 4 columns. I.
- HORN SILVER DISTRICT, NEVADA. By F. L. Ransome. Min. & Sci. Press, vol. 99, p. 433. 2 columns.
- THE HORN SILVER DISTRICT, NEVADA. By F. L. Ransome. U. S. G. S., Bull. 380, p. 41. 3 pages. 1908.
- GENESIS OF THE LAKE VALLEY, NEW MEXICO, SILVER DEPOSITS. By C. R. Keyes. T. A. I. M. E., vol. 39, p. 139. 30½ pages. I.
- THE PRESIDIO SILVER MINES, SHAFTER, TEXAS. By M. P. Kirk. E. & M. J., vol. 88, p. 818. 4½ columns. I.

SHAFTER SILVER DISTRICT, PRESIDIO COUNTY, TEXAS. By W B. Phillips. E. & M J., vol. 90, p. 1303 6½ columns. I.

SILVER-LEAD MINES OF THE UNITED STATES. E. & M. J., vol. 85, p. 374. 1 column.

PARK CITY, UTAH. Min. & Sci. Press, vol. 100, p. 793. 4 columns. I.

THE GRAN PROBRE SILVER MINE IN VENEZUELA. By C. Kissler. Min. Mag., vol. 2, p. 121. 4 pages.

Occurrence of Tin

BIBLIOGRAPHY OF TIN-DEPOSITS IN NORTH AMERICA. T A I M. E., vol. 38, p. 682. 1 page

See also UNITED STATES.

NIGERIAN TIN MINING. E. & M J., vol. 90, p. 1299. ½ column.

TIN DEPOSITS OF THE TRANSVAAL. E. & M. J., vol. 88, p. 778. 2½ columns.

TIN MINING AND ORE DRESSING IN SOUTH AFRICA. By E M. Weston. E. & M. J., vol. 89, p. 411, 7½ columns, I.; p. 470, 7 columns, I; p. 573, 7 columns, I

TIN IN THE BELGIAN CONGO T. A. I. M. E., vol. 41, p. 209 2 pages I.

THE GROENFONTEIN TIN MINES By E. M. Weston E & M. J., vol. 90, p. 515. ½ column. I

THE SOUTH AFRICAN TIN DEPOSITS. By W R Rumbold. T A. I. M. E., vol. 39, p. 783 7 pages. I.

TIN MINING IN CAPE COLONY. By H. D. Griffiths. P C. M. & M., Soc. S. A., vol. 8, p. 167. 28 columns. I.

RECENT DEVELOPMENT OF ALASKAN TIN DEPOSITS By A. J. Collier. U. S. G. S., Bull. 259, p. 120. 7½ pages. I.

TIN IN YORK REGION, ALASKA. By A. H. Brooks. U. S. G. S., Mineral Resources, 1900.

GEOLOGY OF THE SEWARD PENINSULA TIN DEPOSITS, ALASKA. By A. Knopf. U. S. G. S., Bull. 358. 72 pages. I. 1908.

THE SEWARD PENINSULA TIN DEPOSITS, ALASKA By A. Knopf U. S. G. S., Bull. 345, p. 251 18 pages. I. 1907.

TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA. By A. H. Fay. Min. & Sci. Press, vol. 95, p. 744. 6 columns. I.

TIN DEPOSITS OF CAPE PRINCE OF WALES, ALASKA By A H Fay. T A. I. M. E., vol. 38, p. 669. 9 pages. I.

OCCURRENCE OF WOLFRAMITE AND CASSITERITE IN THE GOLD PLACERS OF DEADWOOD CREEK, BIRCH CREEK DISTRICT, ALASKA. By B L Johnson. U. S. G. S., Bull. 442, p. 246. 5 pages. 1909.

TIN MINING AND MILLING IN NORTH QUEENSLAND. By G W Williams. E. & M. J., vol. 87, p. 1092. 6½ columns.

THE NORTH DUNDAS TIN DISTRICT. By J. M. Bell. Min. Mag., London, vol. 4, p. 59. 4 columns Map

TIN MINING IN BOLIVIA. By W. R. Rumbold. Min. Mag., London, vol. 2, p. 451. 6 columns. I.

TIN MINING IN BOLIVIA. By W. Gray and A. L. Halden Min. Mag., London, vol. 3, p. 203. 6 columns. I.

THE CHOROLQUE TIN DISTRICT, BOLIVIA. Min. Mag., London, vol. 4, p. 213. 6 columns. I. D.

TIN DEPOSITS OF THE CAROLINAS. By S. M. Ball E & M. J., vol. 87, p. 1130 2½ columns.

TIN PRODUCTION IN THE PROVINCE OF YUNNAN, CHINA. By W. F. Collins. T. I. M. & M., vol. 19, p. 187. 24 pages. I.

OCCURRENCE OF TIN IN THE PROVINCE OF YUNNAN, CHINA. T I. M. & M., vol. 19, p. 188. ½ page.

TIN, TUNGSTEN, AND TANTALUM DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. U. S. G. S., Bull. 380, p. 131. 32 pages. I. 1908.

MINING IN THE MALAY STATES. By E. S. Marks. Min. & Sci. Press, vol. 98, p. 31. 10½ columns. I.

TIN MINING IN ULN GELANGOR, FEDERATED MALAY STATES. By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages. I.

MINING LODE TIN IN MALAYA. E. & M. J., vol. 86, p. 371. 4 columns.

THE RED RIVER, CORNWALL, ENGLAND. By E. Walker. Min. & Sci. Press, vol. 97, p. 849. 2 columns.

A TIN DEPOSIT NEAR SPOKANE. By A. R. Whitman. Min. & Sci. Press, vol. 95, p. 49. 1½ columns. I.

THE CERRO DE PASCO MINING DISTRICT, PERU. By C. C. Sample. E. & M. J., vol. 85, p. 155. 11 columns. I.

TIN DEPOSITS OF TASMANIA. M. & M., vol. 31, p. 309. 4 columns. I.

NOTES ON THE ZEEHAN MINING FIELD, TASMANIA. By G. W. Williams. E. & M. J., vol. 89, p. 713. 7½ columns. I.

TIN MINING IN TASMANIA. By J. B. Lewis. E. & M. J., vol. 85, p. 485. 12½ columns. I.

MOUNT BISCHOFF OF TASMANIA. By F. H. Bathurst. Min. Mag., London, vol. 3, p. 195. 10 columns. I.

FRANKLIN MOUNTAIN TIN PROSPECTS. By R. Chauvenet. M. & M., vol. 30, p. 529. 4½ columns.

TIN DEPOSITS OF THE SOUTHERN APALACHIANS. By L. C. Graton. U. S. G. S., Bull. 293. 134 pages. I. 1906.

See also MISCELLANEOUS DISTRICTS.

TIN ORE AT SPOKANE, WASHINGTON. By A. J. Collier. U. S. G. S., Bull. 340, p. 295. 12 pages. I. 1907.

See also THEORY OF ORE DEPOSITS and GEOLOGY OF FUELS AND ORES.

Occurrence of Tungsten

TUNGSTEN: Its Occurrence and Use. M. & M., vol. 30, p. 387. ½ column.

RARE METALS: Tungsten. By C. Baskerville. E. & M. J., vol. 87, p. 203. 2½ columns.

NOTES ON THE OCCURRENCE OF TUNGSTEN MINERALS NEAR CALABASAS, ARIZONA. By J. M. Hill. U. S. G. S., Bull. 430, p. 164. 3 pages.

A TUNGSTEN DEPOSIT IN WESTERN ARIZONA. E. & M. J., vol. 90, p. 1103. ½ column.

OCCURRENCE OF TUNGSTEN IN RAND DISTRICT, CALIFORNIA. By S. A. Dolbear. E. & M. J., vol. 90, p. 904. 4½ columns.

TUNGSTEN MINING IN CALIFORNIA. E. & M. J., vol. 86, p. 573. 2 columns. I.

THE TUNGSTEN ORES OF CANADA. E. & M. J., vol. 88, p. 729. 2½ columns.

TUNGSTEN AND THE MOOSE RIVER SCHEELITE VEINS. By A. A. Hayward. J. M. Soc. N. S., vol. 15, p. 65. 14 pages.

THE OCCURRENCE OF TUNGSTEN ORE IN CANADA. By T. L. Walker. J. C. M. I., vol. 11, p. 367. 4½ pages.

TUNGSTEN INDUSTRY OF BOULDER COUNTY, COLORADO, IN 1908. By R. D. George. E. & M. J., vol. 87, p. 1055. 2 columns. Map.

TUNGSTEN IN SAN JUAN COUNTY, COLORADO. By W. C. Prosser. E. & M. J., vol. 90, p. 320. 2 columns. I.

TUNGSTEN DEPOSITS OF SOUTH DAKOTA. By F. L. Hess. U. S. G. S., Bull. 380, p. 131. 32 pages. I. 1908.

TUNGSTEN ORE DEPOSITS OF THE COEUR D'ALENE. By H. S. Auerbach. E. & M. J., vol. 86, p. 1146. 6½ columns. I.

TUNGSTEN DEPOSITS IN THE SNAKE RANGE, WHITE PINE COUNTY, EAST-

ERN NEVADA. By F. B. Weeks. U. S. G. S., Bull. 340, p. 263. 7 pages. I. 1907.

STRUCTURE OF THE TUNGSTEN DEPOSITS OF MOOSE RIVER, NOVA SCOTIA. By E. R. Faribault. J. M. Soc. N. S., vol. 15, p. 59. 6 pages.

TUNGSTEN ORE IN WASHINGTON. By A. Wolf. M. & M., vol. 31, p. 307. 2 columns.

NOTES ON TUNGSTEN DEPOSITS NEAR DEER PARK, WASHINGTON. By H. Bancroft. U. S. G. S., Bull. 430, p. 214. 3 pages. 1909.

Occurrence of Wolframite

NOTE ON A WOLFRAMITE DEPOSIT IN THE WHEATSTONE MOUNTAINS, ARIZONA. By F. L. Hess. U. S. G. S., Bull. 380, p. 164. 2 pages. 1908.

HANDLING AND STORAGE OF MINERAL

Methods of Handling Mineral and Coal

MATERIAL-HANDLING MACHINERY AND ITS EVOLUTION. By E. H. Messiter. Min. & Sci. Press, vol. 101, p. 138. 3½ columns. D.

MINE CAR CAGING MACHINE. M. & M., vol. 31, p. 413. 1 column. I.

HANDLING COAL ON THE TIPPLE AT THE CRESCENT MINE NEAR CALIFORNIA, PENNSYLVANIA. E. & M. J., vol. 89, p. 328. 2 columns. I.

See also PREPARATION OF COAL.

AN ORE-HANDLING PLANT IN NEW CALEDONIA. E. & M. J., vol. 87, p. 391. 15 columns. I.

EQUIPMENT AND ORE HANDLING AT CORNWALL MINE, PENNSYLVANIA. By Q. Bent. E. & M. J., vol. 88, p. 725. 5½ columns. I.

HANDLING THREE THOUSAND TONS OF ORE PER DAY AT THE GRANBY MINES AND SMELTER, PHOENIX AND GRAND FORKS, BRITISH COLUMBIA. By A. B. W. Hodges. J. C. M. I., vol. 11, p. 407. 8 pages. I.

See also MINE EQUIPMENT.

Tramming and Mucking

TRAMMING AND MUCKING IN THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 389. 1 column.

THE MUCKING PROBLEM IN TUNNELS. By R. L. Hetrick. M. & M., vol. 30, p. 98. 2 columns. I.

See METHODS OF TUNNELING.

TRAMMING AND MUCKING IN THE NEWHOUSE TUNNEL. E. & M. J., vol. 86, p. 758. ¾ column.

MUCKING IN SHAFT-SINKING. E. & M. J., vol. 85, p. 392. 3 columns.

HANDLING ORE IN GLORY HOLE MINE AT DE LAMAR, NEVADA. E. & M. J., vol. 87, p. 452. ½ column. I.

See also OPEN CUT MINING.

HANDLING ORE UNDERGROUND IN THE GLOBE-KELVIN DISTRICT MINES, ARIZONA. E. & M. J., vol. 89, p. 813. 1½ columns.

ORE HANDLING AT COPPER QUEEN MINE. By M. C. Milton. M. & M., vol. 30, p. 148. 5½ columns. I.

UNDERGROUND HANDLING AND TRANSPORT OF ORE. By C. B. Saner and Geo. Carter. P. C. M. & M. Soc. S. A., vol. 5, p. 7. 2 columns.

See also HAULAGE SYSTEMS.

METHODS OF ORE HANDLING AT THE RICHARDSON MINES, GUYSBOROUGH COUNTY, NOVA SCOTIA. By H. S. Badger. J. M. Soc. N. S., vol. 13, p. 83. 18 pages. I.

HANDLING ORE IN THE QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p. 407. 5 pages. I.

HANDLING COAL UNDERGROUND IN THE CAPE BRETON ISLAND MINES. J. C. M. I., vol. 13, p. 648. 2 pages. I.

ARRANGEMENT OF PARTINGS IN A COAL MINE: Side Track for Storage

of Empty and Loaded Cars. By H. J. Nelms. E. & M. J., vol. 90, p. 824. 3 columns. I.

See also SWITCHES, TURNOUTS, ETC

A COAL-LOADING MACHINE. By W. Whaley. M. & M., vol. 31, p. 206. 3½ columns. I.

A MECHANICAL SUBSTITUTE FOR THE SHOVEL IN COAL MINES. By W. E. Hamilton. E. & M. J., vol. 85, p. 814. 7 columns. I.

See also COST OF HANDLING AND STORING and COST OF TRAMMING.

Loading and Unloading Cars and Boats, Etc.

LOADING BARGES WITH COAL. T. I. M. E., vol. 36, p. 664. 28 pages. I.

COAL AND ORE LOADING PLANT, NEW RHINE HARBOR. By J. B. Van Bruse. E. & M. J., vol. 88, p. 763. 7 columns. I.

SEAWALLS POINT COAL PIER. By F. F. Harrington. M. & M., vol. 30, p. 321. 5 columns. I.

UNLOADING RAILROAD CARS BY MACHINERY. By S. B. Redfield. E. & M. J., vol. 88, p. 605. 10 columns. I.

CAR-LOADING MACHINE FOR PILING COAL OR LOADING FROM PILES INTO CARS. M. & M., vol. 29, p. 76. 2½ columns. I.

COAL SHIPPING PIER. By H. Donkin. J. M. Soc. N. S., vol. 12, p. 83. 2 pages.

COAL SHIPMENT AND THE LAY-OUT OF STAIRHEADS WITH SPECIAL REFERENCE TO ANTI-BREAKAGE APPLIANCES. T. I. M. E., vol. 39, p. 650. 67 pages. I.

MODERN HOLMEN COALING STATIONS. By C. P. Ross. M. & M., vol. 31, p. 639. 3 columns. I.

COAL SHIPMENT AND THE LAYING-OUT OF STAIRHEADS, WITH SPECIAL REFERENCE TO ANTI-BREAKAGE APPLIANCES. By J. Kirsopp. T. I. M. E., vol. 36, p. 610. 116 pages. I.

CHANGES IN IRON ORE SHIPPING PIERS. E. & M. J., vol. 85, p. 1036. 1½ columns.

THE RAKOWSKY AUTOMATIC UNLOADING ORE CAR. By L. S. Austin. E. & M. J., vol. 88, p. 109. 2 columns. I.

HANDLING CRUSHED ROCK ON SAN FRANCISCO BAY. By F. K. Blue. E. & M. J., vol. 86, p. 1153. 7 columns. I.

CONCRETE LOADING PLATFORM FOR LOADING CARS UNDERGROUND. E. & M. J., vol. 88, p. 939. ½ column. I.

See also USE OF CONCRETE IN MINES

Chutes for Loading Cars and Skips

STEEL ORE CHUTE FOR USE IN HIGH-GRADE STOPES. E. & M. J., vol. 90, p. 706. ½ column.

STEEL SKIP LOADING CHUTE. E. & M. J., vol. 90, p. 1292. 1½ columns. I.

SKIP LOADING CHUTE. E. & M. J., vol. 89, p. 256. ½ column. I.

UNDERGROUND HOPPER FOR LOADING SKIPS. By T. L. Wittich. E. & M. J., vol. 89, p. 1004. 1½ columns. I.

BULKHEADED ORE CHUTE. E. & M. J., vol. 89, p. 1310. 1 column. I.

ORE CHUTE IN GRANBY MINES. J. C. M. I., vol. 11, p. 402. I.

CHUTES FOR HANDLING ORE IN THE GRANBY MINES. E. & M. J., vol. 87, p. 253. 1 column. I.

ORE CHUTE. Steel and Wood. E. & M. J., vol. 88, p. 421. 1 column. I.

CHUTE GATE AT MAMMOTH MINE, KENNETT, CALIFORNIA. E. & M. J., vol. 90, p. 107. ½ column. I.

FINGER CHUTES. By C. A. Chase. Min. & Sci. Press, vol. 98, p. 315. 2 columns. I.

THE FINGER CHUTE. By T. A. Rickard. Min. & Sci. Press, vol. 97, p. 538. 4½ columns. I.

FINGER CHUTE FOR FILLING WHEEL-BARROWS. E. & M. J., vol. 88, p. 1130 1 column. I.

THE CHINAMAN CHUTE. T I M & M., vol. 18, p. 294, 1 page, I.; p. 310, 1½ pages.

A MODIFIED "CHINAMAN" CHUTE E. & M. J., vol. 89, p. 1215. 1 column I

THE "CHINAMAN" ORE CHUTE. Min. & Sci. Press, vol. 96, p. 667. ½ column. I.

THE "CHINAMAN" ORE CHUTE E & M J, vol. 88, p. 472. 1 column. I.

WINGED CHUTE IN THE ARGONAUT MINE, CALIFORNIA. E. & M. J., vol. 90, p. 59. 1 column. I.

THE ZUEBLIN SYSTEM OF ORE CHUTES. By A. Gradenwitz. E. & M. J., vol. 90, p. 902. 1½ columns. I.

DEVICE FOR CLEARING A HUNG-UP CHUTE By J B Wilson. E. & M J, vol. 89, p. 696 1½ columns I.

See also COST OF HANDLING AND STORING.

See also ORE BINS, ETC.

Weighing Ore and Coal

AUTOMATIC SCALE FOR WEIGHING COAL. E. & M. J., vol. 87, p. 421. ½ column.

RICHARDSON AUTOMATIC WEIGHING MACHINE. Min. & Sci. Press, vol. 95, p. 788. 2 columns. I.

WEIGHING ORE IN STAMP MILLS. By F. A. Ross E. & M. J, vol. 86, p. 804. 3 columns. I.

See also STAMP MILL PRACTICE.

Elevators

PECK'S CENTRIFUGAL ELEVATORS. By W. Peck. T. Au I M E., vol. 10, p. 265. 4 pages. I

GATES' ELEVATORS. Min & Sci. Press, vol. 96, p. 715. 2½ columns. I.

HIGH SPEED ELEVATORS By W. W. Lighthipe. Sch Mines Quart., vol. 29, p. 321. 6 pages I

DETAILED CONSTRUCTION OF ELEVATORS IN THE CŒUR D'ALENE MILLS. E. & M. J, vol. 89, p. 21. 11 columns. I.

CHAT ELEVATOR AND LOADER. E. & M. J, vol. 89, p. 257. 1 column. I.

MECHANICAL ELEVATOR FOR ELEVATING GRAVEL IN MINING. By T. A. Rickard. Min. & Sci Press, vol. 98, p. 415. 6½ columns I.

See also HYDRAULIC MINING.

TAILINGS ELEVATORS ON THE RAND. By E. M. Weston E & M. J, vol. 86, p. 539. 2 columns. I.

See also DISPOSAL OF WASTE and CONVEYORS FOR MINERAL AND COAL, also COST OF OPERATING ELEVATORS, ETC.

Storage of Coal and Mineral

BUNKER HILL COAL STORAGE PLANT By F. W. Brady. M & M., vol. 31, p. 166. ½ column. I.

See also first volume of INDEX.

HAULAGE IN MINES

Tractive Force in Haulage

MINE RESISTANCE. By T. W. Fitch. M. & M., vol. 30, p. 722 5 columns

See also first volume of INDEX.

Haulage Systems

THE EVOLUTION OF MINE HAULAGE. By E. B. Wilson M. & M., vol. 30, p. 683, 11 columns, I.; p. 715, 11 columns, I.

EVOLUTION OF MINE HAULAGE. By E. B. Wilson. M. & M., vol. 30, p. 683, 11½ columns; vol. 31, p. 45, 7½ columns, I.; p. 71, 10½ columns, I

HAULAGE IN THE CAPE BRETON ISLAND MINES J. C. M. I., vol. 13 p. 646. 3 pages. I

THE WABANA MINES AND HAULAGE SYSTEM. By G. A. Gillies. J. C. M. I., vol. 13, p. 632. 8½ pages. I.

DESCRIPTION OF HAULAGE SYSTEM INSTALLED TO TAKE THE PLACE OF HORSES AT No. 3 AND No. 4 COLLIERIES OF THE NOVA SCOTIA STEEL AND COAL COMPANY, LTD., AT SYDNEY MINES, NOVA SCOTIA. By J. Johnston. J. M. Soc. N. S., vol. 15, p. 89. 4 pages. I.

HAULAGE AT THE CRESCENT COAL MINE NEAR CALIFORNIA, PENNSYLVANIA. E. & M. J., vol. 89, p. 326. 1½ columns. I.

HAULAGE IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 298. 1 column.

UNDERGROUND HAULAGE IN COAL MINES. E. & M. J., vol. 86, p. 859. 3 columns.

AN UNDERGROUND HAULAGE SYSTEM. By A. H. Fay. E. & M. J., vol. 88, p. 938. 4½ columns. I.

See also **HAULAGE ON INCLINES.**

ARRANGEMENT OF HAULAGE WAYS IN MILLING SYSTEM OF MINING. E. & M. J., vol. 88, p. 920, ½ column, I.; p. 963, ½ column, I.

CHAIN DRIVES. M. & M., vol. 29, p. 31. 1½ columns. I

ENDLESS ROPE HAULAGE. By H. G. Kay. P. C. M. & M. Soc. S. A., vol. 10, p. 198, 5½ columns, I.; p. 291, 1½ columns, I.; p. 319, 1 column; p. 457, 1 column; p. 254, 3 columns; p. 404, ½ column

ENDLESS ROPE HAULAGE SYSTEM. M. & M., vol. 31, p. 45. 3½ columns I

See also **ELECTRICAL HAULAGE** and **COST OF HAULAGE.**

Animal Haulage

MULE HAULAGE IN FLAT SEAMS. E. & M. J., vol. 86, p. 138. ½ column.

See also **COST OF HAULAGE.**

Haulage on Inclines

GRAVITY PLANTS. By A. W. Evans. M. & M., vol. 29, p. 418. 6½ columns I

METHOD OF HAULAGE EMPLOYED IN THE WIND ROCK MINE, TENNESSEE. M. & M., vol. 31, p. 66. 1 column. I

THE GRAVITY INCLINED PLANT: Graphically Considered. By S. B. Fisher. P. E. Soc. W. Pa., vol. 2, p. 234. 30 columns. D.

THE MOSGROVE INCLINE. By W. L. Affelder. M. & M., vol. 29, p. 278. 2½ columns I.

THE BOSTON CONSOLIDATED TRAM. By L. S. Cates. M. & M., vol. 30, p. 264. 8 columns I

DESIGNING INCLINED HAULAGE PLANTS. By C. Kuderer. E. & M. J., vol. 85, p. 1148. 2 columns

INCLINED ROOM HAULAGE. E. & M. J., vol. 85, p. 1188. 2 columns. I

THE "MCGINTY": An Incline Plane for Room Work in Coal Mines. M. & M., vol. 29, p. 464. 2½ columns I.

SELF-ACTING INCLINES OR "JIGS" IN ROOM WORK. M. & M., vol. 29, p. 491. ½ column I

SELF-ACTING TOP FOR GRAVITY PLANE. By H. M. Conner. M. & M., vol. 30, p. 123. 2 columns. I.

THE NORTH STAR GO-DEVIL: a Device for Handling Cars in Stopes of the North Star Mines, Grass Valley, California. E. & M. J., vol. 87, p. 397. ½ column. I.

See also **HAULAGE SYSTEMS** and **ELECTRICAL HAULAGE**, also **COST OF HAULAGE.**

Steam Locomotives

See first volume of **INDEX.**

Compressed Air Haulage

COMPRESSED AIR LOCOMOTIVES FOR MINE HAULAGE. M & M, vol 31, p 72 2 columns I

TWO-STAGE AIR LOCOMOTIVES. M. & M., vol. 31, p. 365. 8½ columns I.

LOCOMOTIVE HAULAGE IN MINES M. & M, vol 31, p. 71. 10 columns. I.

See also GASOLINE MOTORS, ELECTRICAL HAULAGE and COST OF HAULAGE.

Gasoline Motors

GASOLINE MOTOR HAULAGE. By G. E Sylvester. M. & M., vol 31, p. 629. 3 columns. I

GASOLINE LOCOMOTIVE FOR MINE USE. M. & M., vol. 31, p. 542 2½ columns I

GASOLINE MINE LOCOMOTIVE. M & M., vol 31, p. 30. 3 columns. I.

See also COMPRESSED AIR HAULAGE and COST OF HAULAGE

Electrical Haulage

LOCOMOTIVE HAULAGE ON THE OVER-HEAD TROLLEY SYSTEM. E. & M. J, vol 89, p. 1237. 1½ columns.

ELECTRIC LOCOMOTIVE FOR MINE HAULAGE. M. & M., vol. 31, p. 72. 6 columns. I.

THE CRAB LOCOMOTIVE IN COAL MINES. E & M J., vol. 87, p. 446. 1½ columns

ELECTRIC MINING LOCOMOTIVE FOR THE CLINCHFIELD CORPORATION. E. & M. J., vol. 88, p. 18. 1½ columns. I.

ELECTRIC LOCOMOTIVE TESTING PLANT. E. & M. J., vol. 85, p. 1067. ½ column. I.

RECENT ELECTRIC LOCOMOTIVES FOR MINE HAULAGE. E. & M. J., vol. 86, p. 26. 2 columns I.

MOTOR HAULAGE IN FLAT SEAMS. E. & M. J., vol. 86, p. 137. 1 column.

See also COMPRESSED AIR HAULAGE.

A NEW STYLE OF AUTOMATIC GATHERING REEL E. & M. J, vol 85, p. 319. 1½ columns. I

STORAGE BATTERY LOCOMOTIVE FOR USE IN MINES. By J B Van Brussel E. & M. J, vol 89, p. 768. 1½ columns. I.

STORAGE BATTERY EXTENSION TO COLLIERY POWER PLANT E. & M. J, vol. 90, p. 614. 3 columns I.

ELECTRIC MOTORS FOR ROPE HAULAGE. By H. W. Reybold M. & M., vol. 31, p 174. 1 column I

ELECTRIC HAULAGE IN THE PHOENIX, BRITISH COLUMBIA, MINES. E. & M. J, vol. 88, p. 1260 1 column.

AN ELECTRICALLY OPERATED PLANE By A. Gradenwitz. M. & M, vol. 30, p. 327. 4 columns. I.

See also HAULAGE ON INCLINES.

ELECTRIC ROPE HAULAGE By W O. Vickery. M & M., vol. 30, p. 713. 4 columns. I.

See also HAULAGE SYSTEMS.

HALIFAX ELECTRIC TRAMWAY PLANT AND STEAM ENGINEERING. By P. A Freeman. J M. Soc. N. S, vol 11, p 57. 11½ pages

DESCRIPTION OF ELECTRIC-HAULAGE PLANT IN OPERATION IN NO 5 COLLIERY, SYDNEY MINES, NOVA SCOTIA By R. Robertson. J. M. Soc. N. S., vol. 15, p. 93. 9½ pages. I.

SOME RECENT ELECTRICAL WINDING AND HAULAGE PLANTS. By M. B. Mountain. T. I. M. E., vol. 37, p 385. 27 pages. I.

See also ELECTRICITY IN THE MINE and COST OF HAULAGE.

Mine Cars: Capacity, Design, Running Gear, Wheels, Etc.

STEEL ORE CAR USED AT THE COPPER QUEEN MINE. M. & M., vol. 30, p. 149. I.

STEEL MINE BUGGY DESIGNED FOR THIN COAL SEAMS. Coal Mining Supplement, E & M. J., vol. 88, p. 41. 1 column. I.

STEEL CAR FOR COAL MINES. Details of Construction E. & M. J., vol. 89, p. 451 $\frac{1}{2}$ column. I.

A HANDY CAR By E. McCormick Min. & Sci. Press, vol. 96, p. 321 1 column. I.

CŒUR D'ALENE MINE CAR. E & M. J., vol. 89, p. 1312. 1 column I.

OHIO COPPER COMPANY'S SAFETY CARS: Man Car M. & M., vol. 30, p. 369. $1\frac{1}{2}$ columns. I.

A COMPOSITE MINE CAR By W. A. Weldin. M. & M., vol. 30, p. 436. $4\frac{1}{2}$ columns. I.

TRAM CAR FOR THE PROSPECTOR: A Horizontal Skid. By G. C. Stoltz. E. & M. J., vol. 89, p. 696 $\frac{1}{2}$ column. I.

SIDE DUMP MINE CAR By C. T. Rice. E. & M. J., vol. 90, p. 1197. $1\frac{1}{2}$ columns. I.

SIDE-DUMP MINE CAR Min & Sci. Press, vol. 101, p. 49. 2 columns. I.

See also **DUMPING DEVICES**

TRUCK FOR CONVEYING MINERS TO THE WORKING FACE E. & M. J., vol. 85, p. 1132. $\frac{1}{2}$ column. I.

MINE CAR REGISTER. M. & M., vol. 29, p. 411. $\frac{1}{2}$ column. I.

AN IMPROVED TYPE OF MINE CAR WHEEL. By J. E. Johnson. E. & M. J., vol. 87, p. 1180. 4 columns.

CHILLED CAR WHEELS. By W. A. Sanford. M. & M., vol. 29, p. 326. 1 column. I.

CAR WHEEL FORGING AND CONDITIONS OF STEEL FOR HIGH SERVICE. By J. H. Baker P. E. Soc. W. Pa., vol. 25, p. 165 $25\frac{1}{2}$ pages. I.

SANFORD-DAY SPRING DRAWBAR M. & M., vol. 30, p. 545. 2 columns. I.

See also **COST OF MINE AND MILL CONSTRUCTION** and **COST OF TRANSPORTATION.**

Wheelbarrows

See first volume of INDEX.

Sheaves, Couplings, Clips, Drums, Etc.

DRUMS FOR GRAVITY PLANES M. & M., vol. 29, p. 419. 1 column I.

ROLLERS AND SHEAVES FOR GRAVITY PLANES M. & M., vol. 29, p. 421. $\frac{1}{2}$ column.

COAL CAR COUPLINGS E & M. J., vol. 85, p. 1206. $\frac{1}{2}$ column I.

SELF-ACTING CABLE CLAMP. E. & M. J., vol. 85, p. 1242. $1\frac{1}{2}$ columns. I.

Mine Roads, Tracks, Etc.

MINE TRACK By E. B. Wilson M & M., vol. 31, p. 408. $3\frac{1}{2}$ columns. I.

RAIL BONDING IN MINES. By V. Rhea. M & M., vol. 31, p. 673. 2 columns. D.

STEEL TIES FOR MINE USE. M. & M., vol. 29, p. 217 $\frac{1}{2}$ column. I.

See also **USE OF CONCRETE IN MINES.**

See also **SURFACE SURVEYS, ETC.,** and **UNDERGROUND SURVEYS.**

See also **RAILS, RAIL-SECTIONS, ETC,** and **COST OF HAULAGE, also COST OF TRANSPORTATION.**

Switches, Turnouts, Turntables, Etc.

A SPRING TRACK SWITCH. M & M., vol. 29, p. 218 $\frac{1}{2}$ column. I.

A CHEAP AND EFFICIENT SPRING-SWITCH. By S. Clarke. Min & Sci. Press, vol. 101, p. 231 $\frac{1}{2}$ column I.

AUTOMATIC SWITCH ARRANGEMENT ON MINE INCLINES. By R. Grimshaw. E. & M. J., vol. 87, p. 952. 1 column. I.

AUTOMATIC DERAILING DEVICES AND CAR STOP By H. C. Dismon. M. & M., vol. 29, p. 257. 1 column. I.

RUNAWAY CAR STOP. E & M. J., vol. 85, p. 1252. $\frac{1}{2}$ column. I.

TURNTABLE FOR MINE CARS. E. & M. J., vol. 90, p. 9. $\frac{1}{2}$ column. I.

MINING TURNTABLE. By W. C. Richards E. & M. J., vol. 90, p. 305. 1 column I.

HOISTING IN MINING

Methods of Hoisting, Appliances, Etc.

THE EVOLUTION OF HOISTING. By E. B. Wilson M. & M., vol. 31, p. 153, 8 columns, I; p. 251, 10½ columns, I, p. 298, 10 columns, I.; p. 358, 12½ columns, I.

EVOLUTION OF HOISTING. By E. B. Wilson M. & M., vol. 31, p. 444. 4 columns. I.

DUTIES OF HOISTING ENGINEERS. E. & M. J., vol. 90, p. 603. 1½ columns.

STATIONARY VS. MOVING HOISTING PLANTS By J. F. Jackson E. & M. J., vol. 89, p. 521. 3 columns.

HOISTING AT THE HELEN IRON MINE. J. C. M. I., vol. 13, p. 127. 2 pages.

HOISTING AND HAULAGE AT THE NORTH STAR MINE. By W. H. Spaulding E. & M. J., vol. 85, p. 899. 3 columns. I.

See also **HAULAGE SYSTEMS**

WINDING MACHINERY ON THE BENDIGO GOLDFIELD By A. Harkness T. Au. I. M. E., vol. 8, pt. 2, p. 205. 10 pages. I.

HOISTING COAL IN PENNSYLVANIA. By J. H. Haertter. Coal Mining Supplement, E. & M. J., vol. 88, p. 11. 18½ columns. I.

STEAM WINDING ENGINES IN ENGLISH COAL MINES. By J. Hinton. E. & M. J., vol. 86, p. 1013. 3½ columns.

THREE THOUSAND HORSE POWER WINDING ENGINE By J. B. Van Brussel. E. & M. J., vol. 87, p. 904. 4 columns. I.

THE HECLA MINE HOIST By J. C. McQuiston. M. & M., vol. 31, p. 28. 2 columns. I.

ORE-HOISTING APPLIANCES AT THE WHARF OF THE TYEE COPPER COMPANY, VANCOUVER, BRITISH Co-

LUMBIA. By E. Jacobs M. & M., vol. 29, p. 499. 2 columns. I.

See also **MINE EQUIPMENT AND COST OF HOISTING**

Calculations for Hoisting Engines

See first volume of INDEX.

Speed of Hoisting

TIME OCCUPIED IN WINDING ON THE RAND T. Au. I. M. E., vol. 5, p. 61. 1½ pages.

SPEED OF HOISTING AT BRITISH COLLIERIES E. & M. J., vol. 87, p. 224. ¼ column.

SPEED OF HOISTING IN DEEP MINING. P. C. M. & M., Soc. S. A., vol. 9, p. 16, 3 columns, p. 18, 2 columns.

See also **DEEP WINDING.**

RAPID HOISTING. E. & M. J., vol. 86, p. 1010. 1½ columns.

RAPID HOISTING WITH LIGHT EQUIPMENT By G. A. Packard Min. & Sci. Press, vol. 95, p. 470. 1 column.

RAPID HOISTING WITH WIRE GUIDE. By H. C. Watson. E. & M. J., vol. 89, p. 1313. 2½ columns. I.

Electric Hoisting

BIBLIOGRAPHY OF ELECTRIC HOISTING. T. A. I. M. E., vol. 41, p. 101. 8 pages.

SYSTEMS OF ELECTRIC HOISTING. T. A. I. M. E., vol. 41, p. 77. 24 pages. D.

FLY-WHEEL MOTOR-GENERATOR SET FOR OPERATING ELECTRIC HOISTS. E. & M. J., vol. 85, p. 1049. 2½ columns. I.

AN ELECTRICALLY OPERATED HOISTING PLANT. By A. Gradenwitz. E. & M. J., vol. 88, p. 74. 8½ columns. I.

HOISTING IN MINING

TS OF AN LGNER ELECTRIC HOIST
y R. R. Seeber T. A. I. M. E.,
ol 41, p 109. 11½ pages I.

CTRIC MINE-HOISTS By D. B.
ushmore and K. A. Pauly. T.
. I. M. E., vol 41, p. 58. 50
ages I

CTRIC HOISTING IN MINING OPERA-
TIONS By S. F. Walker. E. &
I. J., vol 90, p 1014 9 columns. I.

CTRIC HOISTING AND PUMPING IN
EE CRIPPLE CREEK DISTRICT. By
. A. Worcester. E. & M. J., vol
7, p. 1057 1½ columns

also ELECTRICALLY DRIVEN PUMPS.
E RECENT ELECTRICAL WINDING
ND HAULAGE PLANTS. By M. B.
ountain T. I. M. E., vol 37,
385. 27 pages. I.

also ELECTRICAL HAULAGE

CTRIC HOISTING EQUIPMENT AT
INONA, MICHIGAN By R. R.
eber. E. & M. J., vol. 88, p. 110.
½ columns. I.

CTRIC COLLIERY WINDING IN ENG-
LAND. By T. Hinton. E. & M. J.,
ol 87, p 898. 2 columns

CTRIC HOISTS AS ADAPTED FOR
OAL MINES. By R. H. Rowland.
& M. J., vol 87, p. 443 9½ col-
umns. I.

also ELECTRICITY IN THE MINE and
COUNTERBALANCING IN HOISTING.

ING MAGNETS. Min & Sci Press,
ol 95, p. 755 2 columns I

also COST OF HOISTING

Pneumatic Hoisting

COST OF HOISTING

first volume of INDEX

Hoisting by Water Power

HE HOIST OPERATED BY IMPULSE
ATER WHEELS. E. & M. J.,
ol 85, p 1137. 6 columns. I.

also METHODS OF HOISTING, ETC.

Gas and Oil Hoisting Engines

See first volume of INDEX.

Deep Winding

THE DESIGN AND EQUIPMENT OF
SHAFTS FOR DEEP WINDING. P. C.
M. & M. Soc. S. A., vol. 8, p 161
1½ columns

See also SPEED OF HOISTING and first
volume of INDEX

Counterbalancing in Hoisting

OVER-BALANCE WEIGHT FOR SINGLE-
DRUM HOIST. By S. A. Worcester.
E. & M. J., vol. 85, p 907. 4½ col-
umns. I.

COUNTERBALANCED HOISTING. By R.
L. Herrick M. & M., vol 29,
p 442. 5 columns. I.

COUNTERBALANCING BY THE KOEPE
PULLEY. P. C. M. & M. Soc. S. A.,
vol 9, p 84. 2 columns.

KOEPE DISK AND WHITING HOISTS.
T. A. I. M. E., vol. 41, p 75. 2
pages. D.

COUNTERBALANCING WITH ELECTRIC
HOISTS. E. & M. J., vol. 87, p 443.
½ column.

See also ELECTRIC HOISTING and
METHODS OF HOISTING, ETC.

Overwinding and Its Prevention

SAFETY DEVICES FOR MINE HOISTS.
By U. P. Swineburne. E. & M. J.,
vol 85, p 150. 7 columns. I

AUTOMATIC THROTTLE-CLOSING DE-
VICE FOR HOISTING ENGINES. By
S. S. Ramsey M. & M., vol. 29,
p. 287 2 columns. I.

THE PREVENTION OF OVERWINDING.
E. & M. J., vol 85, p. 150. 1½ col-
umns.

DEVICES FOR THE PREVENTION OF
OVERWINDING E. & M. J., vol. 87,
p. 1150. 1 column.

See also PROTECTION IN MINING.

Hoisting Buckets, Methods of Dumping, Etc.

USING THE ORE BUCKET. By S. A. Worcester. E. & M. J., vol. 89, p. 552. 3 columns. I.

METHOD OF HANDLING SINKING BUCKETS. By W. B. Baggeley. E. & M. J., vol. 89, p. 856. 3 columns. I.
See also BUCKET DUMPS.

Windlasses and Whims for Hoisting

A HANDY WINDLASS. By F. S. Beckett. Min. & Sci. Press, vol. 95, p. 429. $\frac{1}{2}$ column. I.

DETAILS OF A HORSE WHIM. J. C. M. I., vol. 13, p. 628. I.

Cages for Hoisting

CAGE USED IN MARQUETTE RANGE. E. & M. J., vol. 89, p. 647. $\frac{1}{2}$ column. I.

NEW SAFETY CAGE AT MOUNT MORGAN. E. & M. J., vol. 89, p. 649. 1 column. I.

See also PROTECTION IN MINING.

HINGED SHOES FOR CAGES. E. & M. J., vol. 88, p. 421. 1 column. I.

FENCE GATES FOR PIT-CAGES DISCUSSION. T. I. M. E., vol. 36, p. 50. 3 pages.

COLLAPSIBLE GATE FOR CAGES. E. & M. J., vol. 89, p. 1262. 2 columns. I.

Skips for Raising Mineral

SKIPS AND CAGES. By S. A. Worcester. Min. & Sci. Press, vol. 96, p. 486. 3 columns. I.

See also CAGES FOR HOISTING.

SKETCH OF VERTICAL SKIP AS USED AT THE CRESSON MINE. M. & M., vol. 31, p. 738. I.

SKIP FOR HOISTING COAL. E. & M. J., vol. 89, p. 858. 1 column. I.

AUTOMATIC DUMPING SKIP FOR VERTICAL SHAFTS. By G. C. McFarland. E. & M. J., vol. 87, p. 1281. 7 columns. I.

SKIPS REPLACING ORE CHUTES. E. & M. J., vol. 88, p. 1188. 1 column.

See also CHUTES FOR LOADING CARS AND SKIPS.

CRANE FOR CHANGING SKIPS. E. & M. J., vol. 89, p. 5. 1 column. I.

SKIP-CHANGING DEVICES AT BUTTE. By R. L. Hertick. M. & M., vol. 30, p. 359. $4\frac{1}{2}$ columns. I.

WHITFORD-MILLS CHANGING DEVICE. By E. M. Weston. E. & M. J., vol. 90, p. 1195. 1 column. I.

WHITFORD-MILLS SKIP LOADING DEVICE. By E. M. Weston. E. & M. J., vol. 90, p. 1146. 2 columns. I.

See also SKIP DUMPS.

Brakes for Hoists

ELECTRICALLY OPERATED BRAKES FOR INDUSTRIAL PURPOSES. By H. A. Steen. P. E. Soc. W. Pa., vol. 24, p. 385, 24 pages, I., vol. 25, p. 138, 14 pages.

See also first volume of INDEX.

Drums and Sheaves

REEL-HOISTS: Electric. T. A. I. M. E., vol. 41, p. 66. 6 pages. D.

CONICAL AND CYLINDRO-CONICAL DRUM HOIST. T. A. I. M. E., vol. 41, p. 72. 1 $\frac{1}{2}$ pages. D.

NOTES ON CERTAIN ALTERATIONS TO A LARGE WINDING-DRUM. By G. P. Hyslop and J. Magee. T. I. M. E., vol. 36, p. 246. 8 $\frac{1}{2}$ pages. I.

Indicators for Hoists

AN IMPROVED INSTRUMENT FOR RECORDING THE WORKING OF WINDING AND OTHER ENGINES. By A. V. Kochs. T. I. M. E., vol. 38, p. 431. 4 $\frac{1}{2}$ pages. I.

See also first volume of INDEX.

Shaft Bottom Layouts

SHAFT BOTTOM LAYOUTS. M. & M., vol. 30, p. 460. I.

SHAFT BOTTOM LAYOUTS. E. & M. J., vol. 90, p. 872. Map.

SHAFT BOTTOM ARRANGEMENT, ECCLES No. 11 MINE, WEST VIRGINIA. M. & M., vol. 29, p. 475. 1.

LARGE UNDERGROUND STATION IN A COEUR D'ALENE MINE E. & M. J., vol 90, p 6 2 columns. I.

Safety Catches for Mine Cages

SAFETY CATCHES FOR CAGES E. & M. J., vol. 88, p 421. $\frac{1}{2}$ column. I.

SAFETY STOP ON GUIDE TIMBERS. E. & M. J., vol. 89, p. 907. 1 column. I.

THE LEH'S SAFETY CLUTCH. E. & M. J., vol 88, p 526. 1 column. I.

THE CRAMP SAFETY DEVICE FOR ATTACHING TO MINE CAGES By E. D. Spencer. T. I. M. E., vol. 36, p. 156. 5 pages. I.

SAFETY CLUTCHES WITH SPECIAL REFERENCE TO THE RUTHVEN CLUTCH. By J. H. Ruthven T. I. M. E., vol 38, p. 399. 9 pages.

A NEW SAFETY-CATCH FOR ARRESTING CAGES IN SHAFTS. By J. Harrison and R. Oliver T. I. M. E., vol 37, p. 189. 2 pages. I.

A SAFETY DEVICE FOR CAGES AT THE CHAPIN MINE. E. & M. J., vol 88, p. 745. 1 column. I.

See also PROTECTION IN MINING.

Ropes, Chains, Couplings, Guides, Crossheads, Etc.

SAFETY SINKING HOOKS. By H. Louis. E. & M. J., vol 85, p. 817. $1\frac{1}{2}$ columns. I.

SAFETY SINKING HOOK. E. & M. J., vol. 86, p. 94. $\frac{1}{2}$ column. I.

SWIVEL HOOK FOR HOISTING E. & M. J., vol. 89, p. 601. $\frac{1}{2}$ column. I.

ATTACHMENT BETWEEN ROPE AND SINKING BUCKET. By C. B. Brodigan. Min. & Sci Press, vol. 95, p. 467. 1 column. I.

HOISTING ROPE CONNECTION Hook and Capping E. & M. J., vol. 86, p. 185. 1 column. I.

See also CONNECTIONS FOR WIRE ROPES, ETC.

IMPROVEMENTS IN CROSSHEADS FOR SHAFT SINKING. By E. M. Weston E. & M. J., vol. 85, p. 500. 5 columns. I.

See also SHAFT SINKING

CHAINS AND CHAIN MAKING. By J. H. Baker P. E. Soc. W. Pa., vol 24, p 221. 20 pages. I.

CHAINS AND CROSS-BARS FOR HANDLING MINE CARS By O. V. Greene E. & M. J., vol. 85, p. 316. 9 columns. I.

CROSSHEAD FOR BUCKET HOISTING The Berry Form E. & M. J., vol. 85, p. 151. 1 column. I.

BERRY'S SAFETY CROSSHEAD FOR SINKING E. & M. J., vol. 86, p. 41. 4 columns. I.

SAFETY CROSSHEAD FOR BUCKET SHAFT E. & M. J., vol 89, p 1262. $\frac{3}{4}$ column. I.

See also PROTECTION IN MINING.

SHAFT GUIDES. P. C. M. & M. Soc. S. A., vol 8, p. 264, $\frac{1}{2}$ column; p 349, 1 column, vol. 9, p. 17, $\frac{1}{2}$ column, I.

STEEL SHAFT GUIDES E. & M. J., vol. 86, p. 1010 $\frac{1}{2}$ column. I.

GUIDE AND GUIDE SUPPORTS IN THE FILBERT MINE, PENNSYLVANIA. M. & M., vol. 30, p 560. I.

See also SHAFT LINING

SPRING FORMULAE SIMPLIFIED By C. B. Albree P. E. Soc. W. Pa., vol. 24, p. 433. 16 pages. D.

See also COST OF HOISTING and COST OF ROPES.

Cage Keeps, Chairs, Etc.

LANDING CHAIRS FOR MINE CAGE. By J. C. Houston E. & M. J., vol. 90, p. 7. 1 column. I.

HYDRAULIC LANDING CHAIRS By M. Clapier E. & M. J., vol 88, p. 1233. 2 $\frac{1}{2}$ columns. I.

CHAIRS ON THE CAGE. E. & M. J., vol. 89, p. 258. $\frac{1}{2}$ column. I.

AN IMPROVED TYPE OF LANDING CHAIRS FOR MINING CAGES. By J. C. Houston. J. C. M. I., vol. 13, p. 464. 3 pages I

AN AUTOMATIC ELECTRICAL SYSTEM FOR INDICATING THE POSITION OF "CHAIRS" IN SHAFTS By W. E. Wainwright. T. A. I. M. E., vol. 13, p. 61. 4 pages. I.

Shaft-Closing Arrangements

FENCE-GATES FOR WINDING-SHAFT CAGES. By C. A. Crofton. T. I. M. E., vol. 39, p. 8. 4½ pages I

SAFETY DEVICE IN LANDINGS E. & M. J., vol. 86, p. 124. 1 column. I.

See also **PROTECTION IN MINING**

LABOR IN MINES

General

SINGLE SHIFT. By C. B. Horwood. Min. Mag. London, vol. 4, p. 140. 2 columns.

HANDICAPS OF RIGID WORKING HOURS E. & M. J., vol. 90, p. 1115. 7½ columns.

EIGHT-HOUR LEGISLATION IN NEVADA AND CALIFORNIA. Min. & Sci. Press, vol. 98, p. 559. 1½ columns.

THE CALIFORNIA EIGHT-HOUR LAW. E. & M. J., vol. 87, p. 1247. 1 column.

THE EIGHT-HOUR BILL AS RELATED TO ENGLISH COAL MINING. By G. R. Dixon. E. & M. J., vol. 85, p. 861. 6 columns.

LABOR WASTING AND LABOR SAVING. By S. A. Worcester. E. & M. J., vol. 89, p. 647. 4 columns.

STANDARDS OF WORK. E. & M. J., vol. 90, p. 302. 3½ columns.

LABOR EFFICIENCY IN MINING OPERATIONS. By P. B. Scotland. E. & M. J., vol. 88, p. 528. 5½ columns.

STEADY-PAY MEN. Min. & Sci. Press, vol. 97, p. 59. ½ column

THE PROTECTION OF BOY LABOR IN COAL MINES E. & M. J., vol. 89, p. 732. 1 column.

THE FALSIFICATION OF COAL MINERS' CERTIFICATES. E. & M. J., vol. 88, p. 782. 5½ columns.

CHECK SYSTEM AT THE CABIN BRANCH MINE. E. & M. J., vol. 88, p. 1187. 2 columns.

ELECTRIC RECORDING APPARATUS FOR MINE WATCHMEN. By C. L. C.

Fichtel. E. & M. J., vol. 87, p. 454. 3½ columns I

See also **ELECTRICITY IN THE MINE.**

DIAGRAM SHOWING LABOR DISTRIBUTION IN A COLORADO COAL MINE E. & M. J., vol. 88, p. 1011. D.

LABOR CONDITIONS IN NICARAGUA. T. A. I. M. E., vol. 41, p. 624. 2 pages.

LABOR CONDITIONS IN THE CŒUR D'ALENNE. Min. & Sci. Press, vol. 96, p. 192. 3½ columns.

THE RIGHTS OF THE MINER. By T. F. Van Wagenen. Min. & Sci. Press, vol. 96, p. 669. 9½ columns.

WELFARE OF LABORERS IN REDUCTION WORKS By L. S. Austin. Min. & Sci. Press, vol. 96, p. 489. 7 columns.

SOCIAL CONDITIONS AMONG IRON AND STEEL EMPLOYEES E. & M. J., vol. 90, p. 1305. 1½ columns.

THE SOCIOLOGICAL SIDE OF THE MINING INDUSTRY. By W. H. Moulton. T. L. S. M. I., vol. 14, p. 82. 16 pages.

THE SOCIOLOGICAL SIDE OF THE MINING INDUSTRY. By W. H. Moulton. E. & M. J., vol. 88, p. 860. 12 columns.

THE SOCIOLOGICAL SIDE OF COAL MINING. By C. R. King. E. & M. J., vol. 88, p. 212. 4 columns. I.

MORAL REVOLUTION IN ANTHRACITE MINING. By P. M. Greer. E. & M. J., vol. 89, p. 1171. 3½ columns.

CO-OPERATIVE COAL MINING IN ENGLAND. E. & M. J., vol. 88, p. 21. $\frac{1}{2}$ column.

CO-OPERATIVE COAL MINING. E. & M. J., vol. 88, p. 780. 2 columns.

CO-OPERATION IN MINING AND GEOLOGY. By U. S. Grant. Min. & Sci. Press, vol. 96, p. 333. 2 columns.

A CO-OPERATIVE GOLD MINE: Miners Operating a Mine. Min. & Sci. Press, vol. 22, p. 88. 1 column

GAMBLING AT GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 97, p. 20. 4 columns. I.

THE YAQUI WAR. E. & M. J., vol. 86, p. 123. 5 columns.

See also COST OF LABOR.

Mine Workmen and Labor Problems

THE EMPLOYMENT OF UNSKILLED LABOUR IN MINES AND THE NECESSITY FOR TRAINING TO THE MINER'S OCCUPATION. By J. Hibbard T. A. I. M. E., vol. 9, p. 64. 11 pages.

A LABOR CHART FOR THE MANAGEMENT OF MINING AND MILLING OPERATIONS. By J. Macdonald. T. A. I. M. E., vol. 39, p. 664. 3 pages. D.

See also MANAGEMENT OF MINES.

THE MINE LABOUR PROBLEM: Wages, Contract or Tribute. By F. D. Power. T. A. I. M. E., vol. 7, p. 121. 17 pages.

WHITE LABOUR IN MINING. By Tom Johnson. P. C. M. & M. Soc. S. A., vol. 9, p. 224, 6 columns; p. 305, $2\frac{1}{2}$ columns, p. 389, 2 columns.

WHITE LABOUR IN MINING. By T. Johnson. P. C. M. & M. Soc. S. A., vol. 10, p. 14. 4 columns.

MANAGEMENT OF LABOR IN RAND MINES. T. A. I. M. E., vol. 39, p. 574. $3\frac{1}{2}$ pages. I.

LABOR ON THE RAND. Min. & Sci. Press, vol. 96, p. 814. $1\frac{1}{2}$ columns.

LABOR ON THE RAND. T. A. I. M. E., vol. 39, p. 218. $5\frac{1}{2}$ pages.

LABOR ON THE RAND. P. C. M. & M. Soc. S. A., vol. 8, p. 265. 2 columns.

THE CHINESE ON THE RAND. By T. L. Carter. T. A. I. M. E., vol. 39, p. 553. $24\frac{1}{2}$ pages. I.

THE KAFFIR MINE LABORER. By T. L. Carter. T. A. I. M. E., vol. 39, p. 419. 32 pages. I.

THE CHINAMAN IN MALAYA. P. C. M. & M. Soc. S. A., vol. 7, p. 101. 3 columns.

MEXICAN LABOR. Min. & Sci. Press, vol. 95, p. 83. 1 column.

MINE LABOR AND SUPPLIES IN MEXICO. By M. R. Lamb. E. & M. J., vol. 86, p. 1245. 9 columns. I.

CHARACTER AND HABITS OF THE MEXICAN MINER. By A. H. Rogers. E. & M. J., vol. 85, p. 700. 8 columns.

MINE LABOR IN RUSSIA: Bogosloosk Mining Estate. T. A. I. M. E., vol. 39, p. 278. 2 pages.

WELSH COAL MINERS OBJECT TO MINING MACHINES. E. & M. J., vol. 87, p. 897. $2\frac{1}{2}$ columns.

HIGH MASS IN A MINE. Min. & Sci. Press, vol. 22, p. 259. $\frac{1}{2}$ column.

Health of Miners

HUMIDITY, ITS NECESSITY AND BENEFITS. By W. W. Brand. Heating and Ventilating Magazine, July, 1910.

PROTECTIVE VALUE OF HUMIDITY. By J. Ashworth. M. & M., vol. 31, p. 108. $3\frac{1}{2}$ columns.

CONDITIONS IN MINES LEADING TO EXPLOSIONS. Col. Eng., vol. 9, p. 112.

HUMIDITY IN VENTILATION; EFFECT ON COAL DUST. By Sir W. Galway. Col. Guard., June 25, 1909, p. 1271.

UNDERGROUND HUMIDITY IN THE COMSTOCK MINES, NEVADA. T. A. I. M. E., vol. 41, p. 43. 4 pages. D.

MOISTURE IN MINE AIR. M. & M., vol. 30, p. 583. $5\frac{1}{2}$ columns. I.

- EFFECT OF HUMIDITY ON MINE EXPLOSION. By C. Scholz. T. A. I. M. E., vol 39, p. 328. 8 pages.
- HYGROMETRIC OBSERVATIONS IN COAL MINES. By A. H. Stokes. T. I. M. E., vol 36, p. 143. 12 pages. I.
- PHYSIOLOGICAL EFFECTS OF HIGH TEMPERATURE AND HUMIDITY. By G. J. Young. E. & M. J., vol. 88, p. 1155. 3½ columns. I.
- HUMIDITY AFFECTS WORKMEN. Dr. Cadman, Report, p. 4.
- EFFECT ON WORKMEN OF HIGH TEMPERATURE AND HUMIDITY. T. A. I. M. E., vol 41, p. 50. 3 pages.
- See also MINE ATMOSPHERE AND GASES.
- ANKYLOSTOMIASIS. "Miners' Anemia." A Résumé of European Experiences. By F. W. Gray. J. M. Soc. N. S., vol. 11, p. 75. 22½ pages.
- ANKYLOSTOMIASIS IN SOUTH AFRICA. P. C. M. & M. Soc. S. A., vol. 9, p. 175. 4½ columns.
- THE EFFECT OF COMMON SALT ON THE ANKYLOSTOMA PARASITE. P. C. M. & M. Soc. S. A., vol. 7, p. 415. ½ column.
- PREVENTION OF ANKYLOSTOMIASIS. By C. Harpour. E. & M. J., vol 89, p. 976. ½ column.
- PRECAUTIONS TAKEN TO COMBAT ANKYLOSTOMIASIS IN EUROPEAN MINES. E. & M. J., vol. 89, p. 829. 1½ columns.
- MINERS' DISEASES: Study of Diseases. Min. & Sci. Press, vol. 101, p. 471. 1½ columns.
- SOURCE, TREATMENT AND PREVENTION OF MALARIA. By Dr. F. A. Chester and C. C. Semple. E. & M. J., vol. 88, p. 718. 10½ columns.
- THE EYESIGHT OF COAL MINERS. E. & M. J., vol 86, p. 1012. 1 column.
- CAUSE OF SICKNESS AMONG KAFFIR MINERS. T. A. I. M. E., vol. 39, p. 438. 1 page.
- ACCLIMATIZATION AND MORTALITY IN MINING. P. C. M. & M. Soc. S. A., vol. 7, p. 170. 2 columns.
- UNHEALTHFUL PRACTICES IN THE METALLURGY OF LEAD. By E. L. Collins. E. & M. J., vol. 90, p. 113. 3½ columns.
- COMPRESSED AIR ILLNESS. T. I. M. E., vol. 30, p. 220. 3 pages.
- FIRST MODERN CHANGE HOUSE IN THE BIRMINGHAM DISTRICT. E. & M. J., vol. 89, p. 409. 1 column. I.
- EXAMPLES OF MODERN SANITARY DRY HOUSES. By A. H. Fay. E. & M. J., vol. 88, p. 822. 6½ columns. I.
- SANITARY MINE BUNKS. E. & M. J., vol. 90, p. 705. 1 column. I.
- THE DESIGN OF SMALL HOUSES FOR COAL MINING TOWNS. E. & M. J., vol. 88, p. 1174. 3 columns. I.
- See also HEALTH OF MINERS.
- ANACONDA TOILET CAR. By A. W. Charles. M. & M., vol. 30, p. 410. ½ column. I.
- THE COMPANY SURGEON. By E. M. Libby. T. L. S. M. I., vol. 15, p. 195. 5½ pages.
- A HOSPITAL EMERGENCY CAR IN ALABAMA COAL MINES. E. & M. J., vol. 89, p. 1168. 1½ columns.
- MINE HOSPITAL AT MARVINE MINE. M. & M., vol. 30, p. 160. ½ column. I.
- MINERS' PHTHISIS IN THE TRANSVAAL. P. C. M. & M. Soc. S. A., vol. 6 p. 176. 3½ columns.
- MINERS' PHTHISIS IN WESTERN AUSTRALIA. P. C. M. & M. Soc. S. A., vol. 7, p. 191. ½ column.
- MINERS' PHTHISIS ON THE BENDIGO FIELD. P. C. M. & M. Soc. S. A., vol. 7, p. 230. 2½ columns.
- EFFECT OF DUST ON HEALTH OF MINERS. P. C. M. & M. Soc. S. A., vol 6, p. 300. 4 columns.
- See also PROTECTION IN MINING.

Apprenticeship in Mining

APPRENTICESHIP TO MINING P. C. M. & M. Soc. S. A., vol. 9, p. 4. 1 column.

MINING APPRENTICES P. C. M. & M. Soc. S. A., vol. 9, p. 226 2 columns.

THE STUDENT APPRENTICESHIP SYSTEM FROM A MANUFACTURER'S STANDPOINT. By A. G. Wessling. P. Soc. P. E. E., vol. 15, p. 444. 14 pages.

TRAINING OF APPRENTICES. Min. & Sci. Press, vol. 97, p. 784. $\frac{1}{2}$ column.

Labor Troubles, Strikes, Etc.

THE ANTHRACITE MINERS' DEMANDS IN 1909 E. & M. J., vol. 87, p. 405. $1\frac{1}{2}$ columns.

THE ANTHRACITE STRIKE SETTLEMENT. E. & M. J., vol. 87, p. 964 $1\frac{1}{2}$ columns.

ARBITRATION: Compulsory and Voluntary. Min. & Sci. Press, vol. 95, p. 311 4 columns

THE AVOIDANCE OF COAL MINE STRIKES. By F. W. Parsons E. & M. J., vol. 89, p. 1334. $2\frac{1}{2}$ columns.

LABOR TROUBLES AT THE HOMESTAKE STRIKE. E. & M. J., vol. 89, p. 273. 4 columns.

THE LABOR TROUBLES AT GOLDFIELD. E. & M. J., vol. 85, p. 124, 3 columns; p. 126, $2\frac{1}{2}$ columns; p. 177, $2\frac{1}{2}$ columns; p. 364, $\frac{1}{2}$ column.

LIQUOR AND LABOR. T. A. I. M. E., vol. 39, p. 432. $4\frac{1}{2}$ pages.

Discipline in Mines

DISCIPLINE IN MINES. M. & M., vol. 29, p. 313. 1 column.

DISCIPLINE IN MINES. E. & M. J., vol. 87, p. 224. 2 columns.

DISCIPLINE OF THE MINES. Min. Mag., vol. 3, p. 383, $2\frac{1}{2}$ pages; vol. 4, p. 261, 1 page.

MORAL COURAGE IN MINE OFFICIALS. By S Reynolds. M & M., vol. 30, p. 602. $1\frac{1}{2}$ columns.

CHECKING MEN IN AND OUT OF MINES. E. & M. J., vol. 90, p. 1196. $\frac{3}{4}$ column. I.

DISCIPLINE IN COAL MINES E. & M. J., vol. 85, p. 35. 2 columns

See also PROTECTION IN MINING.

Workmen's Aid, Compensation and Insurance

INSURANCE AND MINE ACCIDENTS. By W. H. North. Min. & Sci. Press, vol. 100, p. 163. $1\frac{1}{2}$ columns.

INSURANCE IN THE MINES OF THE CŒUR D'ALENE REGION. Min. & Sci. Press, vol. 96, p. 193. 1 column.

INSURANCE OF MINE WORKERS. By M. M. Duncan M & M, vol. 30, p. 166. 3 columns

GERMAN MINERS' INSURANCE AND ANNUITY FUNDS. By F. L. Hoffman E. & M. J., vol. 90, p. 867, 6 columns; p. 900, 4 columns; p. 956, $5\frac{1}{2}$ columns; p. 1007, $4\frac{1}{2}$ columns.

EMPLOYERS' LIABILITY IN EUROPE. E. & M. J., vol. 88, p. 499. 1 column.

AN EMPLOYEES' BENEFIT ASSOCIATION: Copper Queen Company, Arizona. E. & M. J., vol. 89, p. 472. $1\frac{1}{2}$ columns.

PENSIONS FOR IRON MINERS IN THE UNITED STATES. E. & M. J., vol. 87, p. 1242 $1\frac{1}{2}$ columns.

BENEFIT FUNDS AND PENSION SYSTEMS FOR MINERS. T. L. S. M. I., vol. 14, p. 94. $2\frac{1}{2}$ pages

PENSION SYSTEMS FOR MINERS. E. & M. J., vol. 88, p. 863. $1\frac{1}{2}$ columns.

PENSION FUND FOR INDIANA COAL MINERS. E. & M. J., vol. 86, p. 1090. $\frac{1}{2}$ column.

See also COMPENSATION FOR INJURIES.

Labor Unions

THE AMERICAN MINERS' ASSOCIATION Min. Mag., vol 6, p. 332. 2 pages

See also first volume of INDEX

Miners' Wages

THE INCIDENCE OF METHODS OF PAYMENTS ON THE EFFICIENCY OF MINERS By K. Austin P C M & M Soc S A., vol. 8, p 140, 4½ columns, p 243, 5 columns; p 299, 4½ columns; p. 386, 1 column.

DIAGRAM SHOWING ORGANIZATION AND RELATION OF WAGES AND MATERIALS J C M. I., vol 13, p. 170 D.

HANDLING MINERS UNDER THE WAGE SYSTEM By W. L Fleming E & M J., vol. 88, p. 319. 5½ columns

THE PRICE OF LABOR E. & M. J., vol 88, p 30 1½ columns.

WAGE SCALE FOR MINE WORK IN THE DOMINION No 2 COLLIERY, CAPE BRETON ISLAND. J C M I., vol. 13, p. 643. Table.

THE BONUS SYSTEM OF LABOR PAYMENT P. C. M. & M Soc S A., vol 8, p 245 1 column

WAGE SCALE FOR THE HOSMER COAL MINES. J. C. M I., vol 13, p. 249. 3½ pages. Tables.

SCALE OF WAGES IN MONTANA COAL MINES FOR 1909 E & M. J., vol. 87, p 849. Table.

CONNELLSVILLE COKE WAGES E & M. J., vol 89, p. 282. 1 column.

THE PITTSBURG COAL WAGE AGREEMENT, 1910. E. & M J, vol 89, p. 959. 2 columns.

MINE LABOR WAGES IN WASHINGTON. M & M, vol 30, p 19. Table.

WAGE SCALE IN THE KANAWHA REGION, WEST VIRGINIA. M. & M., vol. 30, p. 72. Table

See also CONTRACT SYSTEMS AND COST OF LABOR.

Miners' Clubs and Changing Houses

CLUB HOUSE AT MOUNTAIN IRON, MINNESOTA. M. & M., vol 29, p. 495 1½ columns. I

THE CACTUS CLUB AT THE NEWHOUSE MINES, UTAH. By L Hanchett E & M. J., vol 86, p 1189. 3½ columns I

THE COWANEE CLUB, COPPERHILL, TENNESSEE E. & M. J., vol 88, p 1256 5½ columns. I.

Contract Systems and Leasing

BASIS OF SETTLEMENT IN MINE LEASING By W H Davis M & M, vol 30, p. 20 3 columns.

LEASING IN CRIPPLE CREEK DISTRICT. By C. W. Burgess M. & M., vol. 30, p. 6 11 columns I

TRIBUTING: A Lease System of Mining P. C. M. & M. Soc. S. A., vol 10, p 472. 5 columns.

MINING CONTRACTS Tributors and Stopping P. C. M & M Soc. S A., vol 8, p 48 1 column.

PROFIT SHARING IN THE COMSTOCK MINES E & M. J., vol 86, p 172. ½ column.

THE "PASS" SYSTEM OF WORKING IN THE COMSTOCK MINES. Min & Sci. Press, vol. 100, p. 420. ½ column

RAND MINE RETURNS AND THE FATHOMAGE SYSTEM By W W. Mein. Min. & Sci. Press, vol 101, p. 407 12 columns.

See also MINERS' WAGES.

BONUS SYSTEM EMPLOYED IN SMELTER IN URAL MOUNTAINS. E. & M. J., vol. 90, p 611. ½ column.

GRUB-STAKE CONTRACTS. E. & M. J., vol 86, p 461. ¾ column.

See also PROSPECTING and COST OF METAL MINING.

Ore Thefts

"HIGH-GRADING" IN THE COMBINATION MINE. Min. & Sci. Press, vol. 95, p. 399. ½ column.

HIGH-GRADING AT GOLDFIELD, NEVADA. Min. & Sci. Press, vol 96, p. 774. 6 columns

STEALING OR "HIGH-GRADING." E. & M. J., vol. 89, p. 154. 1½ columns.

LADDERS IN MINES

METHOD OF RIGGING LADDERS TO REACH STOPE BACKS. E. & M. J., vol. 89, p. 357 ¾ column. I.

CHAIN LADDERS IN WASTE CHUTES E. & M. J., vol. 89, p 1149. ¼ column.
See first volume of INDEX.

LIFE IN MINES

FUNGUS ON MINE TIMBERS. J C. M. I., vol. 13, p 467. 3 pages

See also first volume of INDEX.

MANAGEMENT OF MINES

Mine Administration

THE VALUE OF EFFICIENT ENGINEERING IN COAL MINING. By L B. Abbott. E. & M. J., vol. 88, p. 165. 2½ columns.

VALUE OF EFFICIENT ENGINEERING. By L. B. Abbott. M. & M., vol 29, p. 560. 4½ columns.

ENGINEERING POSSIBILITIES. By C. B. Dudley. Min. & Sci. Press, vol. 99, p. 95. 4 columns.

PETROLEUM MINING ENGINEERING. By R. S. Blatchley. M. & M., vol. 31, p. 442. 4 columns.

ENGINEERING OF MODERN COAL PLANTS. By H. N. Eavenson. M. & M., vol. 31, p. 57. 5½ columns. I.

UNDERGROUND MANAGEMENT. Min. Mag., London, vol. 4, p 146. 1½ columns.

THE MANAGEMENT OF COLLIERIES. Min. Mag., vol. 5, p. 281. 10 pages.

MINE ADMINISTRATION OF THE STAG CAÑON FUEL COMPANY'S MINES, NEW MEXICO. T. A. I. M. E., vol. 40, p. 378. 2 pages. D.

ADMINISTRATION OF THE MOUNT MORGAN METALLURGICAL WORKS. E. & M. J., vol. 87, p. 805. 1 column.

EARLY HISTORY OF COLONIAL MINING, IN CONNECTION WITH "IS SCIENTIFIC MANAGEMENT A SUCCESS?" By H. W. F. Kayser T. Au. I. M. E., vol 3, p 183. 8 pages.

SHIPPING, CRUSHING, SAMPLING AND SELLING ORES. Min. & Sci. Press, vol. 20, p. 152. 1½ columns

See also BUYING AND SELLING ORES.

MANAGEMENT OF THE BOGOSLOOSK MINING ESTATE. T. A. I. M. E.; vol 39, p. 276. 1½ pages.

THE PRINCIPLES OF BUSINESS MANAGEMENT OF AN ARCHITECT'S OFFICE PRACTICE. By H. S. Kissam. Sch. Mines Quart, vol 31, p. 45. 11 pages.

EXAMINATION OF MINE OFFICIALS. M. & M., vol. 31, p. 741. 2 columns I.

CAPITAL INVESTMENT PER TON OF OUTPUT, ANTHRACITE FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, p. 44. ¼ column.

THE "WHOLESALE" IDEA IN GOLD MINING. By W. R. Feldtman. T. I. M. & M., vol. 18, p. 355. 12 pages. D.

CONSOLIDATION OF MOTHER LODE MINES. By W. H. Storms. Min & Sci Press, vol 99, p 597. 3½ columns. I.

The Engineer and Engineering Ethics

THE ENGINEER AS A FINANCIER. By J H. Hammond. Min & Sci. Press, vol 97, p 528. 5½ columns

THE HUMAN SIDE OF A MINING ENGINEER'S WORK By E. B. Kirby. E & M J., vol 86, p 131 4½ columns

HUMAN SIDE OF A MINING ENGINEER'S WORK. By E. B. Kirby Min. & Sci. Press, vol. 97, p 61 3½ columns.

FUNCTIONS OF THE CONSULTING MINING ENGINEER By A H Rogers. E. & M. J., vol. 85, p 313. 5 columns

FUNCTIONS OF THE CONSULTING MINING ENGINEERS. By T. B. Comstock. E & M J., vol. 85, p. 570. 5 columns.

ENGINEERING PROFESSIONS. By B B. Lawrence. Sch. Mines Quart., vol. 31, p. 203. 5 pages.

SHOULD THE ENGINEER BE REQUIRED TO HOLD LICENSE? By W. H. Drane. P. Soc P. E. E., vol 16, p. 350. 13 pages.

THE FUNCTION OF THE ENGINEER IN THE CONSERVATION OF THE NATURAL RESOURCES OF THE COUNTRY. By C. S. Howe. P. Soc P. E. E., vol. 16, p 20. 26 pages.

THE PROBLEMS THAT ARE FACING THE ELECTRICAL ENGINEER OF TODAY AND THE QUALITIES OF MIND AND CHARACTER WHICH ARE NEEDED TO MEET THEM. By J. G. White. P. Soc P. E. E., vol. 11, p. 274. 16 pages.

THE TESTING ENGINEER. By C B. Dudley. P. Soc. P. E. E., vol. 13, p. 233. 19 pages.

THE QUESTION OF EXPERT EVIDENCE. E. & M J., vol 87, p. 309. 1½ columns.

THE "CONSULTING ENGINEER" AND A QUESTION OF ETHICS. E. & M. J., vol 87, p. 1101. 3 columns

THE DUTIES AND RIGHTS OF ENGINEERS. By J D Kendall J C. M. I., vol. 11, p. 467. 4½ pages

THE STATUS OF THE MINING PROFESSION. By J C Gwillim. J C. M I, vol 10, p. 321. 21 pages.

PROFESSIONAL ETHICS. By J. H. Hammond. T. A. I. M E., vol 39, p. 620. 8 pages.

PROFESSIONAL ETHICS FOR THE MINING ENGINEER. By J H Hammond. E & M. J., vol 86, p. 717. 6½ columns.

MINING ETHICS ON THE RAND. By R. Gascoyne. E & M. J., vol. 90, p. 818. 4½ columns

THE ETHICS OF THE ENGINEERING PROFESSION. By B B Lawrence Sch. Mines Quart, vol 30, p. 342. 4 pages.

PROFESSIONAL ETHICS Min. & Sci. Press, vol. 97, p 68 3½ columns.

PROFESSIONAL CUSTOMS: Ethics Min. & Sci. Press, vol. 95, p 489, 6½ columns; p. 521, 4 columns; p 551, 4½ columns; p. 581, 3 columns; p. 614, 2 columns; p. 646, 4 columns; p. 677, 3½ columns; p 739, 6½ columns; p. 810, 2 columns.

PROFESSIONAL IDEALISM. By C. F. Courtney. T Au I M. E., vol. 13, p. 1. 6 pages

PROFESSIONAL ETHICS. By R. W. Raymond. T. A. I. M E., vol 41, p 541. 7½ pages.

PROFESSIONAL ETHICS. By V. G. Hillis. T. A. I. M E., vol. 41, p. 549. 12½ pages.

CONTINGENT FEES. Min. & Sci Press, vol. 98, p. 457, 6 columns; p 667, 1½ columns.

Mine Organization

CAPITALIZATION OF SMALL MINES. By A. W. Warwick. E. & M J., vol. 90, p. 771. 4 columns.

EXCESSIVE EQUIPMENT EXPENDITURES ON THE RAND. By Geo. A. Denny. E. & M. J., vol. 85, p. 497. 6½ columns.

THE FINANCE OF A MINE By M. H. Burnham. *Min. Mag.*, London, vol. 4, p. 361, 10½ columns, I.; p. 443, 7½ columns.

REDUCING MINING COSTS AND INCREASING PROFITS. By P. Argall. *E. & M. J.*, vol. 90, p. 1251. 5 columns.

See also **COST KEEPING.**

Buying and Selling Ore

CALCULATING THE TONNAGE OF ORE PILES. By R. T. Hancock. *M. & M.*, vol. 31, p. 158. ½ column.

ON CERTAIN ERRORS IN COMPUTING ORE VALUES. By H. H. Knox. *E. & M. J.*, vol. 85, p. 806. 3 columns. D.

SAMPLING AND ORE BUYING ON THE WEST COAST OF TASMANIA. By F. D. Power. *T. Au I. M. E.*, vol. 3, p. 237. 6 pages.

See also **SAMPLING COAL AND ORES.**

ORE CONTRACTS FROM A PRODUCER'S POINT OF VIEW. By H. M. Adkinson. *E. & M. J.*, vol. 85, p. 992. 15 columns.

SALE OF CRUSHED AND SAMPLED ORES AT SAN FRANCISCO. *Min. & Sci. Press*, vol. 20, p. 121. 2 columns.

VALUATION OF ANTIMONY ORE. *E. & M. J.*, vol. 85, p. 124. 2 columns.

VALUATION OF COPPER IN CHILE. By L. C. Stackey. *Min. Mag.*, London, vol. 3, p. 57. 2½ columns.

See also **COPPER ORES.**

VALUE OF GALENA AND BLENDE IN WALES. *E. & M. J.*, vol. 86, p. 709. 1 column.

SYSTEM OF ZINC ORE BUYING IN MISSOURI. *Min. & Sci. Press*, vol. 83, p. 89. ½ column.

THE PURCHASE OF LEAD ORE IN DERBYSHIRE, ENGLAND. *E. & M. J.*, vol. 88, p. 601. 1½ columns.

SELLING ZINC ORE ON CONTRACT. By L. L. Wittich. *M. & M.*, vol. 31, p. 550. 5½ columns. I.

MARKETING ZINC ORES. By W. G. Martin. *E. & M. J.*, vol. 85, p. 803. 3 columns.

See also **LEAD AND ZINC ORES**

ORE CONTRACTS FROM THE SMELTER'S STANDPOINT. By C. A. Grabill. *E. & M. J.*, vol. 86, p. 73. 13 columns. I.

COBALT ORE BUYING BY SMELTERS. *M. & M.*, vol. 31, p. 705. 2½ columns.

MOST PROFITABLE GRADE OF ORE. *E. & M. J.*, vol. 88, p. 557. 1 column.

See also under **MINERALS, VALUE OF ORES, ETC.**, and **MINE ADMINISTRATION**, also **COST OF ORES AND METALS**

Mine Managers and Superintendents

CONCERNING SUPERINTENDENTS By A. Allen. *Min. & Sci. Press*, vol. 96, p. 229. 2½ columns.

INFLUENCE OF THE UNDERGROUND MINE MANAGER. By J. Virgin. *E. & M. J.*, vol. 89, p. 15. 3 columns.

OPERATING A NOVA SCOTIA COAL MINE. By H. E. Call. *E. & M. J.*, vol. 86, p. 624. 8½ columns. I.

Mine Accounts and Bookkeeping

STANDARDIZATION OF MINE ACCOUNTS. *Min. & Sci. Press*, vol. 97, p. 214. 6 columns.

MINING ACCOUNTS. By R. N. Kirk. *T. Au I. M. E.*, vol. 10, p. 353. 13 pages.

MINE ACCOUNTS FOR THE SUPERINTENDENT. By H. Wilson. *Min. & Sci. Press*, vol. 98, p. 686. 2½ columns. Table.

MINE ACCOUNTS FOR THE SUPERINTENDENT By A. Del Mar. *Min. & Sci. Press*, vol. 96, p. 454. 6½ columns. D.

A CARD SYSTEM OF MINE ACCOUNTING. By R. S. Handy Min. & Sci. Press, vol. 95, p. 50 8½ columns. I

THE RECORDING AND USE OF COLLIERY COST DATA. By F. W. Gray. J. C. M. I., vol. 13, p. 163. 17 pages. D.

THE COST-BOOK SYSTEM Its Principles and Practice Min. Mag., vol. 1, p. 597 5½ pages.

A FACTORY STOCK AND COST-KEEPING SYSTEM By W. J. Spiro Sch. Mines Quart., vol. 30, p. 252 13 pages. D

KEEPING ACCOUNT OF SUPPLIES By M. W. Alderson. Min. & Sci. Press, vol. 95, p. 274, 2 columns; p. 340, 1½ columns.

HANDLING MINE SUPPLIES. By H. H. Fitch. M. & M., vol. 31, p. 267. 10½ columns.

MINE STORES. By F. D. Power T. A. I. M. E., vol. 6, p. 124. 100 pages. Supplies Listed

See also LABOR TROUBLES, ETC.

See also COST KEEPING.

System for Keeping Mining Notes: Filing and Card Systems

RECORDING ENGINEERING RECORDS By L. Hayes M. & M., vol. 29, p. 496. 5½ columns I

A GRAPHIC NOTEBOOK. Administration By F. W. Gray M. & M., vol. 31, p. 332. 4½ columns. D

KEEPING ENGINEERING RECORDS. By E. E. Whiteley. M. & M., vol. 30, p. 132. 5½ columns. I

METHOD OF COLLECTING STATISTICS By W. Lindgren. Min. & Sci. Press, vol. 96, p. 14. 1 column.

Amortization and Depreciation

AMORTIZATION IN MINE FINANCE E. & M. J., vol. 89, p. 403. 2½ columns.

DEPRECIATION AND RESERVE FUNDS FOR ELECTRICAL PROPERTIES. By W. B. Jackson. J. W. Soc. E., vol. 15, p. 587. 32 pages.

A METHOD OF CALCULATING SINKING-FUNDS, AND A TABLE OF VALUES FOR ORDINARY PERIODS AND RATES OF INTEREST By J. B. Dilworth. T. A. I. M. E., vol. 41, p. 533, 3 pages, Table; p. 912, 1½ pages.

See also COST OF MAINTENANCE AND DEPRECIATION

Stocks and Stockholders

VALUE OF MINING STOCK. By M. L. Requa Min. & Sci. Press, vol. 96, p. 329. 4 columns.

VALUE OF MINING STOCK. Min. & Sci. Press, vol. 96, p. 699. 2½ columns.

STOCK COMPANIES AND COMPANY PROMOTION. By H. A. Butters. Min. & Sci. Press, vol. 96, p. 597. 11 columns

THE PSYCHOLOGY OF A "BULL MARKET" E. & M. J., vol. 87, p. 1247. 1 column.

MINING IN WALL STREET. Min. Mag., vol. 4, p. 370 6 pages.

NEW YORK'S OPEN-AIR STOCK MARKET. By W. T. Royce E. & M. J., vol. 87, p. 356 8½ columns. I.

Mine Investment

INVESTMENTS AND SPECULATIONS. Min. Mag., London, vol. 1, p. 39, 8 columns; p. 285, 6 columns.

LEGITIMATE MINING: Its Character. Min. Mag., vol. 5, p. 103. 10 pages.

IS MINING A LEGITIMATE BUSINESS? MINES AS A MEANS OF INVESTMENT. Min. Mag., vol. 10, p. 374 2½ pages

COMPARATIVE MERITS OF COAL MINING INVESTMENTS By F. W. Parsons E. & M. J., vol. 90, p. 32. 1 column.

COAL MINING AS AN INVESTMENT. By H. M. Chance. E. & M. J., vol. 88, p. 316. 5½ columns.

THE SAFETY OF JUDICIOUS MINING INVESTMENTS. By J. P. Channing. E. & M. J., vol. 89, p. 211. 9 columns.

SUGGESTIONS REGARDING MINING INVESTMENTS. By J. H. Hammond. E. & M. J., vol. 89, p. 8. 9½ columns.

MINE INVESTMENTS By G. D. Stone-street. E. & M. J., vol. 87, p. 1193. 2 columns.

PROSPECTUSES: Defined. By F. D. Power. T. A. I. M. E., vol. 10, p. 1. 26 pages.

VALUATION OF MINING SHARES. By Newton B. Knox. Min. & Sci. Press, vol. 96, p. 733. 2½ columns, p. 771, 3 columns.

See also **VALUE OF MINES, ETC.**

HOW TO SELL A MINE. E. & M. J., vol. 86, p. 537, 3 columns.

MINING INVESTORS, MINE OWNERS, MINING ENGINEERS, MINE MANAGERS AND MINERS. By J. O. James. J. M. Soc. N. S., vol. 10, p. 170. 4 pages.

PROTECTING INVESTORS BY EXPOSING MINING FRAUDS. By C. S. Thomas, Jr. E. & M. J., vol. 90, p. 1157. 9½ columns.

BETTER PROTECTION OF MINE INVESTORS. By H. S. Munroe. Min. & Sci. Press, vol. 97, p. 600. 7½ columns.

PROTECTION OF MEXICAN INVESTORS. By F. J. H. Merrill. Min. & Sci. Press, vol. 98, p. 490. 4½ columns.

OPTIONS IN TRANSACTION OF MINING. E. & M. J., vol. 86, p. 571. 1½ columns.

"WASH SALES" OF STOCK. Min. & Sci. Press, vol. 97, p. 442. 1 column.

See also **DEFINITIONS AND TERMS**

Mining Risks and Frauds

RISK IN MINING: Investment in Mining Properties. Min. & Sci. Press, vol. 100, p. 210. 2 columns.

MINING SWINDLES. Min. & Sci. Press, vol. 22, p. 136. 1 column.

See also **SALTING OF MINES.**

Rating and Taxation of Mining Property

MINE TAXATION. J. C. M. I., vol. 13, p. 12. 1 page

OWNERSHIP AND TAXATION OF MINING CLAIMS. By W. Greenwood. E. & M. J., vol. 88, p. 129. 1½ columns.

TAKING "UNGOTTEN MINERALS." E. & M. J., vol. 88, p. 159. ¼ column.

TAXATION OF MINING PROPERTIES. By H. W. Turner. Min. & Sci. Press, vol. 98, p. 46. 1 column.

MINE TAXES IN CALIFORNIA. E. & M. J., vol. 86, p. 1156. ½ column.

THE CORPORATION TAX ON MINING COMPANIES. E. & M. J., vol. 89, p. 254. 1 column.

MINE TAXES IN MEXICO. E. & M. J., vol. 89, p. 417. 1 column.

DRAWBACK REGULATIONS ON MINERALS. E. & M. J., vol. 87, p. 261. ½ column.

DRAWBACK ON ZINC SHAVINGS. E. & M. J., vol. 87, p. 302. ½ column.

DUTY ON ZINC ORES. E. & M. J., vol. 87, p. 461. ½ column.

THE TARIFF ON IRON ORE. By H. O. Young. T. L. S. M. I., vol. 14, p. 179. 14½ pages.

See also **CLAIMS, TAXES, ASSESSMENTS, ROYALTIES, CHARGES, ETC.**

MAPS

Maps of Countries and Districts

FORMULAS AND TABLES TO FACILITATE THE CONSTRUCTION AND USE OF MAPS. By R. S. Woodward. U. S. G. S., Bull. 50. 124 pages. 1889.

THE INTERPRETATION OF TOPOGRAPHIC MAPS. By R. D. Salisbury and W. W. Atwood. U. S. G. S., Professional Paper 61. 96 pages. 1909.

SYSTEM OF MAP-FILING. By G N Pfeiffer. Min & Sci Press, vol 95, p 584. 1½ columns. D.

See also **SYSTEM OF KEEPING MINING NOTES, ETC.**

MAPOTICA GEOLOGICA AMERICA: A Catalogue of Geological Maps of America. By J. Marcou and J. B Marcou. U. S. G S, Bull. 7 184 pages. 1884.

MAP OF THE COAL FIELDS OF ILLINOIS. T. A. I. M. E., vol. 40, p. 8. 1 page. I.

MAPS OF THE ANTHRACITE COAL FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, pp. 8, 9, and 10

MAP OF THE GAS-COAL DISTRICT IN THE PITTSBURG REGION, PENNSYLVANIA. E & M. J., vol. 89, p. 329. I.

MAPS OF THE COALFIELDS OF THE UNITED STATES. E. & M. J., vol. 87, p. 161. I.

See also **OCCURRENCE OF COAL**

MAP OF THE BIRMINGHAM IRON-ORE REGIONS OF ALABAMA. T. A. I. M. E., vol. 40, pp. 90 and 91.

SKETCH MAP OF NEVADA. E. & M. J., vol. 87, p. 290. I

MAP OF MINING DISTRICT OF THE DOMINION OF CANADA. T. I. M. E., vol. 36, pt. 4.

MAP OF SOUTHWESTERN CHIHUAHUA, MEXICO. By H. A. Horsfall. E. & M. J., vol. 85, p. 692. 1½ columns. I.

See also first volume of **INDEX.**

Mine Maps

MAPPING METHODS IN PITTSBURG FIELD. By J. H. Dickerson. M & M., vol. 30, p. 601. 2½ columns

THE MAKING OF MINE PLANS. By G R. Thompson and E. L. Hummel. T. I. M. E., vol. 39, p. 314. 11 pages. I.

PLANS AND SECTIONS OF MINES. By J. Budge. Min. Mag., vol. 5, p. 229. 8 pages

TOPOGRAPHICAL METHODS USED FOR THE SPECIAL MAP OF ROSSLAND, BRITISH COLUMBIA. By W. H. Boyd. J. C. M. I., vol. 11, p. 372 12 pages. Maps.

MINE PLANS AND MINE MODELS, WITH SUGGESTIONS FOR, WHY AND HOW THEY MAY BE COMBINED By N. Dudley. T. A. I. M. E., vol. 1, p. 99. 4½ pages.

COURT MAPS AND MODELS. By T. S. Hattison and H. C. Zulch. M & M., vol. 29, p. 49. 10 columns. I.

See also **MODELS OF MINES AND MACHINERY.**

MAP OF PRICE-PANCOAST MINE: TWO-ENTRY Pitch Workings. M. & M., vol. 31, p. 617. Map

PLAN OF COALTON MINE, WEST VIRGINIA. M. & M., vol. 30, p. 190. I.

PLAN OF MINE No. 1, STEARNS COAL COMPANY, STEARNS, KENTUCKY. M. & M., vol. 30, p. 573. Map.

MINE MAP OF A SOUTHERN INDIANA COAL MINE. E. & M. J., vol. 90, p. 871. I.

MINE MAP OF THE MARIANNA. E. & M. J., vol. 86, p. 1163. I

PLAN OF MINE WORKINGS AT DIAMONDVILLE, WYOMING E & M J., vol. 85, p. 119. Map.

See also **METHODS OF MINING COAL, and DEVELOPMENT.**

STOPE MAPS OF THE GRANBY MINES. E & M. J., vol. 87, p. 255. 1 column.

See also **METHODS OF MINING, ETC., and DEVELOPMENT.**

Geological Maps

GEOLOGICAL MAPPING OF MINE WORKINGS. E. & M. J., vol. 86, p. 385. 2½ columns.

See also **MINE MAPS and MAPS OF COUNTRIES AND DISTRICTS.**

Map Making

See first volume of **INDEX.**

METALLURGICAL METHODS AND PROCESSES

**Metallurgical Processes,
Theory, Etc.**

- SMELTING LOSSES** E & M. J., vol. 86, p 75. 1 column.
- EXTRACTION PERCENTAGES IN METALLURGICAL PLANTS.** By H. A. Magraw. E & M. J., vol 89, p. 705. 3½ columns.
- A METHOD OF CALCULATING SLAGS.** By H. Earle. E. & M. J., vol 87, p 962. 2 columns.
- CALCULATION OF BLAST-FURNACE CHARGES** By P. E. Barbour. Min. & Sci. Press, vol. 99, p 664. 5½ columns. Tables.
- THE USE OF GRAPHIC FORMULÆ IN METALLURGICAL CALCULATIONS** By D. H. Browne. J. C. M. I., vol 10, p. 281. 20 pages. D.
- SLAG REDUCTION.** By J. D. Hubbard. Min. & Sci. Press, vol. 100, p. 223. 2½ columns. I.
- HEATS OF FORMATION OF SOME FERRO-CALCIC SILICATES.** By H. O. Hofman and C. Y. Wen. T. A. I. M. E., vol. 41, p. 495. 8 pages. I.
- HIGH SILICA SLAGS AT THE MAGISTRAL SMELTER** By C. A. Heberlein. E. & M. J., vol 88, p 107, 4 columns; p. 177, 2½ columns.
- SLAG GRANULATION AND EXPLOSIONS.** By R. Hutchinson. E & M. J., vol. 87, p. 1272. 1 column. I.
- THE MANUFACTURE OF THE SLAGS OF REDUCING FURNACES.** Min. Mag., vol. 2, p. 264. 6 pages. D.
- PEROXIDATION OF IRON IN BLAST FURNACES.** By A. Rigo-Patron. E & M. J., vol. 88, p 367. 6 columns.
- THE WESTLY SOTENSEN PROCESS** By E. P. Jennings. E. & M. J., vol. 86, p. 418. 3½ columns.
- FIFTY YEARS OF SMELTING IN THE WESTERN STATES.** By L. S. Austin. Min. & Sci. Press, vol. 100, p. 753. 4 columns.
- NEW SMELTING FURNACES.** The Piltz Furnace. Min. & Sci. Press, vol 22, 2½ columns. I.
- BEHAVIOR OF CALCIUM SULPHATE AT ELEVATED TEMPERATURES WITH SOME FLUXES** By H. O. Hofman and W. Mostowitsch. E & M. J., vol 87, p 602. 3 columns.
- THE BEHAVIOR OF CALCIUM SULPHATE AT ELEVATED TEMPERATURES WITH SOME FLUXES.** By H. O. Hofman and W. Mostowitsch. T. A. I. M. E., vol 39, p. 628. 25½ pages. I.
- THE BEHAVIOR OF CALCIUM SULPHATE AT ELEVATED TEMPERATURES WITH SOME FLUXES** By H. O. Hofman. T. A. I. M. E., vol. 40, p. 807. 1½ pages.
- FLUXES OF THE BIRMINGHAM DISTRICT, ALABAMA.** By E. F. Burchard and C. Butts. U. S. G. S., Bull. 400. 204 pages. I. 1910.
- METALLURGY OF BROKEN HILL, NEW SOUTH WALES** By G. W. Williams. E. & M. J., vol. 86, p. 893. 14 columns.
- METALLURGICAL TREATMENT OF MOUNT MORGAN ORES** By J. B. Wilson. E. & M. J., vol. 87, p. 838. 6 columns. I.
- METALLURGICAL PRACTICE IN WESTERN AUSTRALIA.** By A. E. Drucker. Min. & Sci. Press, vol 101, p 401. 9 columns. I.
- METALLURGY ON THE RAND.** By H. G. Nichols. Min. Mag., London, vol 3, p 44. 2½ columns. I.
- METALLURGY ON THE RAND** By T. L. Carter. Min. Mag., London, vol. 1, p. 57. 5½ columns. I.
- METALLURGICAL CONDITIONS AT COBALT.** By F. N. Flynn. Min. & Sci. Press, vol 97, p 432. 6 columns. I.
- METALLURGICAL PROGRESS IN COLORADO** By P. H. Argall. Min. & Sci. Press, vol. 100, p. 35. 12 columns. I.

METALLURGICAL PRACTICE AT HACIENDA DE LA UNION. By F. Narvaez. E & M J, vol. 86, p 989. 9½ columns. I.

SOME METALLURGICAL PROCESSES AT PACHUCA, MEXICO By C. T Rice. E. & M J, vol 86, p. 559. 13 columns I.

METALLURGICAL METHODS AT PACHUCA, MEXICO. By J M. Nicol. Min Mag, London, vol. 2, p 126. 13½ columns. I

ORE SMELTING AT WHITE PINE DISTRICT, NEVADA Min & Sci. Press, vol. 20, p 401. 3 columns I.

METALLURGY IN NICARAGUA. T. A. I. M. E, vol. 41, p 626. 5 pages.

SMELTING CONDITIONS AT SALT LAKE. By C. De Kalb. Min & Sci. Press, vol 98, p. 23. 7 columns. I.

DESCRIPTION OF THE REDUCTION PLANTS AND PROCESSES OF REDUCTION OF WYALONG ORES By E. Janitzky T. Au I. M. E, vol. 9, p. 177 4 pages.

See also Metallurgy of the Various Metals Under Their Respective Heads and COST OF METALLURGICAL TREATMENT.

Metallurgical Works

THE HENNIG TESTING PLANT AND METALLURGICAL LABORATORY. E. & M. J, vol 86, p. 1198. 4 columns I.

THE USES AND ABUSES OF SMALL SMELTING PLANTS. By H. Lang. E. & M J, vol. 89, p. 455 9½ columns.

THE LOCATION OF SMELTING WORKS By R R Moore. E & M J, vol. 85, p. 546. 2 columns.

THE MOUNT MORGAN METALLURGICAL WORKS. By G. W. Williams E & M. J, vol 87, p. 802. 12 columns. I.

SMALL SMELTING PLANTS IN MEXICO By R W Perry. E. & M J, vol. 88, p 658. 5 columns.

REDUCTION WORKS OF BUTTE CITY, MONTANA By E. D Peters, Jr. U. S. G S, Mineral Resources, 1883 and 1884, vol 14

PINE CANYON SMELTER, UTAH Min. & Sci Press, vol 100, p 639 2 columns. I.

Methods of Assaying, Calculations, Etc.

SOME NOTES ON ASSAYING P C. M & M Soc S A, vol 7, p 270. 3 columns.

MOISTURE AS A SOURCE OF ERROR IN ASSAY REPORTS By G A James E & M J, vol 90, p 1047. 1½ columns.

PRACTICAL ASSAYING. Min Mag., vol 2, p. 396 7 pages.

LABOR-SAVING APPLIANCES IN THE ASSAY LABORATORY. By E Keller. E. & M J., vol. 90, p. 706. 3½ columns. I.

A PORTABLE ASSAY-OUTFIT FOR FIELD-WORK. By S K. Bradford. T. A. I. M E., vol 41, p 561. 7 pages.

ROUTINE ASSAYING ON THE RAND By A. Whitby. P. C M & M. Soc. S. A, vol. 6, p. 264, 18½ columns, I; p. 342, 5½ columns, p 367, 3½ columns, I; vol 7, p 10, 1 column; p. 33, 5½ columns.

ROUTINE ASSAYING ON A WESTRALIAN MINE. By W. B. Blyth. P. C. M. & M. Soc. S A., vol. 9, p. 184, 7½ columns; p. 347, 3 columns; p 393, 2 columns.

NOTES ON ROUTINE MINE SAMPLE ASSAYING. P. C. M & M. Soc. S A, vol 8, p 54. 2½ columns.

PREPARING AND RECORDING SAMPLES FOR USE IN TECHNICAL ASSAY LABORATORIES. By L. D. Huntton. T. A. I. M. E, vol. 40, p 747. 8 pages.

A PORTABLE ASSAY FURNACE. By J. J. Gilho T. Au. I. M. E, vol. 10, p. 270. 5½ pages. I.

- LABOR-**SAVING APPLIANCES IN THE ASSAY-LABORATORY** By E Keller. T. A. I. M. E., vol. 41, p. 786. 2 pages. I.
- TWO PORTABLE ASSAY FURNACES.** By E. W. Buskett E & M. J., vol. 85, p. 1150. 2 columns I.
- BALANCES FOR METALLURGICAL WORK.** By A Austin and S Hunter. Min. & Sci Press, vol. 97, p 224. 4½ columns
- EFFECT OF BORAX IN ASSAYING** E. & M J, vol 86, p. 656. 1½ columns
- BORAX IN ASSAY FLUKES.** By J E Clennell. E. & M. J, vol 87, p 696. 1½ columns.
- ACCURACY IN ASSAYS AND ANALYSES.** By J. W. Howson Min. & Sci. Press, vol. 99, p. 329. 6 columns.
- CONVERSION TABLES FOR ASSAY VALUATIONS.** P C M & M Soc. S. A., vol. 9, p 320. 3 columns.
- METHOD OF PLOTTING MINE-ASSAYS.** By E H Nutter Min. & Sci. Press, vol. 98, p. 727. ½ column D
- CONVERSION TABLES FOR ASSAY VALUATIONS.** By W. J. Sharwood. M. & M, vol 29, p. 250. 1½ columns.
- AN ASSAY-PLAN.** By L. F. S. Holland. Min & Sci. Press, vol. 97, p. 461. 1½ columns D
- CRUCIBLE ASSAYS** By A. A. Steel E. & M. J, vol. 87, p. 1243. 2½ columns.
- NOTE ON THE INFLUENCE OF FINE CRUSHING ON THE ASSAY VALUE.** By A. Whitby. P. C. M. & M. Soc. S. A., vol. 5, p 95, 3½ columns; vol. 6, p. 21, 1½ columns
- GRADING ASSAYS AND GRINDING EFFICIENCIES.** By A Yates. P. C. M. & M. Soc. S. A., vol. 9, p. 187, 7½ columns; p. 238, 2 columns; p 346, 3 columns; p. 395, 1½ columns
- A FURTHER NOTE ON THE INFLUENCE OF FINE CRUSHING AND FUSION ON THE ASSAY VALUE** P C M & M. Soc S. A., vol. 6, p. 21. 1½ columns.
- See also **FINE CRUSHING BY MILLS, ETC.**
- MOUNT MORGAN MINE RECORDS AND ASSAY PLANS.** By J. B Wilson E & M J, vol. 89, p. 710. 8 columns I
- CUPELLATION EXPERIMENTS: The Thermal Properties of Cupels** By C. O Bannister T I M. & M., vol. 18, p. 439 27 pages I
- CUPELLATION OF SILVER** E & M. J., vol 86, p. 326. 2½ columns
- TEMPERATURE DURING CUPELLATION.** E. & M J, vol. 88, p 919 1½ columns.
- EXPERIMENTS WITH PORTLAND CEMENT CUPELS** By T. P Holt and N. C Christensen E & M. J, vol. 90, p 560. 5½ columns. D.
- CEMENT VS. BONE-ASH CUPELS** By J. W Merritt Min. & Sci. Press, vol. 100, p. 649. 2 columns. I.
- See also **CEMENT AND CONCRETE, ETC.**
- NOTES ON SMELTING AND CUPELLATION.** By F. L Piddington P C. M & M. Soc. S A., vol 5, p 8. 1½ columns.
- IMPROVEMENTS IN THE APPLICATION OF WATER COOLED TESTS FOR CUPELLATION.** By E. A. Weinberg. T. Au. I. M. E., vol. 7, p. 167. 2 pages. I.
- VOLATILIZATION OF LEAD AND SILVER IN CUPELLATION** By D M. Liddell. E & M. J., vol 89, p 1264. 1½ columns.
- ON CUPELLATION AND PARTING IN ORE ASSAYING.** By T K. Rose P. C. M. & M. Soc S A., vol. 5, p 165, 5 columns, I, p 237, 3 columns; p. 256, 7 columns, vol. 6, p. 49, 1 column.
- A CHEAP PLATINUM PARTING APPARATUS.** P C. M & M. Soc. S A., vol. 9, p. 256. 5 columns. I.
- COMPARISON OF THE THERMAL PROPERTIES OF CUPELS** By C. O. Bannister and W. N. Stanley. E. & M. J, vol 88, p. 1167. 8½ columns.

- CONSTRUCTION AND MANIPULATION OF A GASOLINE ASSAY-FURNACE** By W. E. Dartow Min. & Sci. Press, vol 95, p. 749. 3½ columns I
- ASSAYING SULPHIDE ORE.** By F. G. Hawley. E. & M. J., vol 89, p. 1221. 2 columns.
- ASSAY OF BATTERY CHIPS AND SCREENS** By L. J. Wilmoth. P. C. M. & M Soc. S. A., vol 8, p. 230, 5 columns; p. 343, 4 columns; p. 378, 2½ columns.
- QUANTITATIVE BLOW-PIPE ASSAY.** E & M. J., vol 85, p. 1111. 1 column
- ANALYTIC WORK AT COPPER QUEEN SMELTER** Min. & Sci. Press, vol 101, p. 147. 2½ columns.
- COMBINATION ASSAY OF COPPER BULLION.** By S. M. Scott. M. & M., vol. 31, p. 240. ½ column.
- SAMPLING AND ASSAYING THE COPPER ORES OF THE ELY DISTRICT** By R. Marsh. Sch. Mines Quart., vol. 30, p. 91. 6½ pages.
- METHODS OF ASSAYING IN CYANIDE PLANTS.** E. & M. J., vol. 88, p. 608. 4 columns.
- THE ASSAY OF CYANIDE SOLUTIONS FOR GOLD CONTENT.** By W. F. Boericke. E. & M. J., vol 88, p. 525. ½ column.
- ASSAY OF CYANIDE PRECIPITATE.** By F. A. Bird. Min. & Sci. Press, vol 99, p. 504. 2½ columns.
- ASSAY OF GOLD AND SILVER CYANIDE SOLUTION.** By T. P. Holt. Min. & Sci. Press, vol 100, p. 863. 1½ columns.
- THE ASSAY OF CYANIDE SOLUTIONS AND SLIME RESIDUE CARRYING DISSOLVED GOLD.** By A. Whitby. P. C. M. & M Soc. S. A., vol 10, p. 134, 4½ columns; p. 289, 1½ columns.
- See also CYANIDING GOLD, ETC.
- ASSAY OF TELLURIDE ORES.** E & M. J., vol. 85, p. 619. 1½ columns.
- COMPARISON OF WET AND CRUCIBLE-FIRE METHODS FOR THE ASSAY OF GOLD TELLURIDE ORES, WITH NOTES ON THE ERRORS OCCURRING IN THE OPERATIONS OF FIRE ASSAY AND PARTING** By W. F. Hillebrand and E. T. Allen. U. S. G. S., Bull. 253 31 pages. 1905.
- ASSAY OF GOLD TELLURIDE ORE** E & M. J., vol. 85, p. 1304 1½ columns
- BEHAVIOR OF TELLURIUM IN ASSAYING** E & M. J., vol 87, p. 1176 1½ columns.
- THE BEHAVIOR OF TELLURIUM IN ASSAYING** By S. W. Smith. T. I. M. & M., vol. 17, p. 463 19½ pages
- THE ASSAY OF TELLURIDE ORES.** By G. T. Holloway and E. B. Pearce. T. I. M. & M., vol 17, p. 171 40 pages
- STANDARDIZATION OF BULLION ASSAYS.** M. & M., vol. 31, p. 690. 1½ columns
- THE INDIAN MINT ASSAY OF SILVER BULLION.** By F. T. C. Hughes. T. I. M. & M., vol 17, p. 334 16 pages I.
- THE ASSAY AND VALUATION OF GOLD BULLION.** By F. P. Dewey. T. A. I. M. E., vol 40, p. 780. 18 pages
- NOTES ON THE ASSAY OF GOLD BULLION.** By T. K. Rose. P. C. M. & M. Soc. S. A., vol 6, p. 36, 5 columns; p. 161, 1½ columns; p. 192, 1 column; p. 248, 2 columns.
- WET ASSAY FOR GOLD.** M. & M., vol 31, p. 143. ½ column.
- LIQUID ASSAY OF GOLD.** By R. De Luce. E. & M. J., vol. 89, p. 405. 1 column.
- ASSAYING STAMP MILL BY-PRODUCTS.** E. & M. J., vol. 87, p. 947. 1½ columns.
- WET GOLD ASSAY.** By R. De Luce. Min. & Sci. Press, vol. 100, p. 895. ½ column.
- ASSAYING FOR GOLD AND SILVER.** Min. & Sci. Press, vol. 22, p. 200. 1½ columns

THE FIRE AND WET ASSAY OF SILVER ORES. E. & M. J., vol 85, p. 269. 2½ columns.

ASSAYING SILVER BULLION. E. & M. J., vol. 87, p. 942. 1½ columns.

ASSAYING IN THE CŒUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 876. 2½ columns.

THE EFFECT OF HIGH LITHARGE IN THE CRUCIBLE ASSAY FOR SILVER By R. W. Lodge. T. A. I. M. E., vol. 38, p. 638. 5½ pages.

THE FIRE AND WET ASSAY OF SILVER ORES E. & M. J., vol. 85, p. 661. ½ column.

ASSAY OF ARSENICAL COBALT SILVER ORES. By D. K. Bullens. E. & M. J., vol. 90, p. 809. 5½ columns D.

COMMERCIAL WET LEAD ASSAY. P. C. M. & M. Soc. S. A., vol. 5, p. 158. 1 column

ASSAY OF LEAD. E. & M. J., vol 86, p. 324. ½ column.

THE ASSAY OF LEAD IN TAILINGS AND SLAGS By E. W. Buskett. E. & M. J., vol 90, p. 408 1½ columns

EXPERIMENTS IN FIRE ASSAYING AT THE REDJANG LEBONG MINE, SUMATRA By G. B. Hogenraad. P. C. M. & M. Soc. S. A., vol. 8, p. 73, 10 columns; p. 150, 2 columns; p. 187, 1½ columns; p. 304, 2½ columns; p. 380, 3 columns.

NOTES ON THE PRACTICE OF ASSAYING IN BRITISH COLUMBIA. By C. S. Baker. J. C. M. I., vol. 11, p. 443. 7 pages.

ASSAYING SPELTER. E. & M. J., vol. 85, p. 812. 2½ columns.

WET ASSAY OF TIN ORES. By J. J. Beringer. Min. Mag., London, vol. 1, p. 231. 3½ columns.

ASSAY OF TIN ORE. E. & M. J., vol. 85, p. 1112 ½ column.

ASSAY OF TIN ORES. By G. Hohagen. E. & M. J., vol. 85, p. 422. ½ column.

WET ASSAY OF TIN ORES P. C. M. & M. Soc. S. A., vol. 10, p. 376. 2 columns.

WET ASSAY FOR VANADIUM ORES. E. & M. J., vol. 90, p. 79. ½ column.

See also DEFINITIONS AND TERMS

See also WEIGHTS AND MEASURES and CONCENTRATION

Metallurgy of Copper

COPPER SMELTING. The Process as Practiced at the Hafod Works, Swansea. Min. Mag., vol 10, p. 33. 5 pages

COPPER SMELTING. By H. M. Howe. U. S. G. S., Bull. 26. 107 pages. 1885.

THE MINING AND METALLURGY OF COPPER, SILVER, LEAD AND ZINC. By F. W. Sewell. T. A. I. M. E., vol. 12, p. 105. 26 pages I. D.

LABORATORY ROUTINE IN MODERN COPPER SMELTERS By H. T. Waller. T. A. I. M. & M., vol. 18, p. 37. 22 pages.

COPPER IN CHLORIDE SOLUTIONS. By G. Fernekes. Min. & Sci. Press, vol. 95, p. 592. 2½ columns.

MOISTURE IN COPPER BULLION. By D. M. Liddell. E. & M. J., vol. 90, p. 1095. 3½ columns.

THE BEHAVIOR OF COPPER-SLAGS IN THE ELECTRIC FURNACE By L. T. Wright. T. A. I. M. E., vol. 41, p. 316. 1½ pages.

THE GREENAWALT ELECTROLYTIC PROCESS. By W. E. Greenawalt. E. & M. J., vol. 90, p. 1062. 12½ columns. I.

SECTIONAL SLAG POT. By E. C. Ruder. M. & M., vol. 31, p. 149. ½ column I.

THE KILNER MATTE TAPPING CAR. By F. T. Havard. E. & M. J., vol. 87, p. 1294 3 columns. I.

SLAG CAR USED AT THE CANANEA SMELTING WORKS By C. F. Shelby. E. & M. J., vol 87, p. 204. 3 columns. I.

- A MATTE-SEPARATING FOREHEARTH.** By E Jacobs E. & M. J., vol 87, p 1232. 2 columns. I
- MATTE SMELTING AT DENVER** By H F Bain Min. & Sci Press, vol 100, p. 250 8 columns I.
- KELLEY SLAG AND MATTE CASTING MACHINE** By F. G. Kelley E. & M J, vol 86, p 610. 4 columns I.
- MATTE SMELTING AT INGOT, CALIFORNIA** By W. B. Bretherton. E & M J, vol. 85, p. 443 6 columns. I.
- METHOD OF HANDLING MATTE AT SELBY, CALIFORNIA** By J. C Bennett. E. & M. J., vol. 85, p 252. 4 columns I
- THE CONSTITUTION OF COPPER-IRON AND COPPER-LEAD-IRON MATTES.** By C A Fulton and I E. Goodner. T. A. I M E., vol 39, p. 584. 35½ pages I.
- THE PRODUCTION OF CONVERTER-MATTE FROM COPPER-CONCENTRATES BY POT-ROASTING AND SMELTING** By E A Packard T. A I M E., vol. 38, p 633. 4½ pages.
- THE CONSTITUTION OF MATTES PRODUCED IN COPPER-SMELTING.** Discussion of A. Gibb's and R. C. Philp's Paper. T. A. I. M. E., vol 38, p. 913. 2½ pages.
- SINTERING OF COPPER ORES** By W. G Perkins Min. Mag., London, vol 2, p. 209. 6½ columns.
- SINTERING OF COPPER ORES IN SPAIN.** By H F. Collins. Min. Mag., London, vol. 1, p 52. 6 columns I.
- METAL LOSSES WITH ORE OF LOW COPPER CONTENT** By C. A. Heberlein E. & M. J., vol. 89, p. 617. 2½ columns.
- METAL LOSSES IN COPPER SLAGS.** By N. M. Zoph Min. & Sci. Press, vol. 100, p. 261. 2 columns.
- METAL LOSSES IN COPPER SLAGS.** By L. T Wright. T. A I M E., vol. 40, p 492. 4 pages. D.
- NOTES ON THE METAL LOSSES IN COPPER SLAGS.** By C. A. Grabill. E & M J., vol. 89, p. 776. 9½ columns. D
- ALLOYS OF COPPER: German Silver, Bronze Ordnance, or Common Metal—Bell Metal** Min Mag, vol 10, p 197. 16 pages.
- COPPER FOR THE FOUNDRY.** By F L. Antisell E. & M. J., vol. 86, p. 225 3 columns.
- THE INFLUENCE OF BISMUTH ON WIRE-BAR COPPER.** By H. N. Lawrie. T. A I M E., vol 40, p 604. 10 pages. I.
- THE INFLUENCE OF BISMUTH ON WIRE BAR COPPER** By H. N. Lawrie T A I M. E., vol. 40, p. 604 10 pages I.
- THE CONSTITUTION OF FERRO-CUPROUS SULPHIDES** By H O. Hofman, W. S. Cayless and E. E Harrington. T. A. I M. E., vol 36, p 142 12 pages. I
- THE NEILL PROCESS AT COCONINO, ARIZONA** By J. W. Neill E. & M. J, vol 85, p 556 2½ columns
- THE NEILL PROCESS AT COCONINO, ARIZONA: Leaching with Sulphur Dioxide** E & M. J., vol. 85, p. 152 1½ columns
- THE JUMAN COPPER LEACHING PROCESS** E. & M J., vol. 86, p 132. 1½ columns
- COPPER LEACHING PLANT IN THE URAL MOUNTAINS.** By A L Simon. T. I M. & M., vol 19, p 212, 30 pages, I; p. 244, 18 pages
- PRECIPITATION OF COPPER FROM BUTTE MINE WATER.** By C J Stose E. & M. J., vol. 87, p 953 5½ columns. I.
- COPPER LEACHING IN THE URAL MOUNTAINS.** E. & M J., vol 89, p 461 1½ columns
- PRECIPITATION OF COPPER FROM CUPFEROUS WATERS.** By F. H. Probert. Min. & Sci. Press, vol. 96, p. 27. 5½ columns. I.

- A COPPER PRECIPITATING PLANT By H. W. Chittenden. E. & M. J., vol. 86, p. 853. 4½ columns.
- THE OUTLOOK FOR HYDROMETALLURGY OF COPPER. By W. E. Greenswalt. E. & M. J., vol. 90, p. 960. 9 columns.
- CONSTRUCTION OF 100-TON COPPER SMELTING PLANT. By C. C. Christensen. E. & M. J., vol. 86, p. 847. 10½ columns.
- THE WASHOE REDUCTION WORKS. M. & M., vol. 30, p. 520. 6½ columns. I.
- THE GREAT COBAR SMELTING WORKS. E. & M. J., vol. 85, p. 950. 15½ columns. I.
- WALLEROO AND MOONTA COPPER MINES AND SMELTERY. By G. W. Williams. E. & M. J., vol. 88, p. 54. 14½ columns. I.
- SMELTING WORKS OF TEZINTLAN COPPER COMPANY. By A. van Zwabenburg. E. & M. J., vol. 90, p. 169. 10 columns. I.
- COPPER SMELTING IN SIBERIA. By W. A. Heywood. Min. & Sci. Press, vol. 97, p. 59. 1 column.
- COPPER SMELTING IN THE ARGENTINE. By C. H. Jones. Min. Mag., London, vol. 1, p. 123. 12½ columns. I.
- COPPER SMELTING IN QUEENSLAND, AUSTRALIA. E. & M. J., vol. 87, p. 605. 2 columns.
- THE SMELTER OF THE MAMMOTH COPPER MINING COMPANY, AT KENNETT, CALIFORNIA. By D. F. Campbell. Min. & Sci. Press, vol. 96, p. 30. 3½ columns. I.
- SMELTING COPPER ORES IN SHASTA COUNTY, CALIFORNIA. E. & M. J., vol. 88, p. 396. 6 columns. I.
- THE GRANBY SMELTER EQUIPMENT. By B. L. Sackett. M. & M., vol. 30, p. 524. 8½ columns. I.
- THE GRANBY SMELTER. By R. Keffer. Min. & Sci. Press, vol. 98, p. 256. 3½ columns. I.
- RECENT DEVELOPMENTS AT THE GRANBY SMELTER. By F. E. Lathe. J. C. M. I., vol. 13, p. 273. 15 pages. I.
- CANANEA ORE-BEDDING SYSTEM. By R. L. Herrick. M. & M., vol. 30, p. 65. 9½ columns. I.
- CANANEA FURNACE PRACTICE. By C. De Kalb. Min. & Sci. Press, vol. 101, p. 9. 6½ columns. I.
- COPPER-GOLD SMELTING AT MAGISTRAL, MEXICO. By R. Linton. Min. & Sci. Press, vol. 97, p. 843. 6½ columns. I.
- THE DOUGLAS COPPER SMELTER AT FUNDICION, MEXICO. By P. E. Barbour. E. & M. J., vol. 85, p. 303. 9 columns. I.
- DOUGLAS SMELTING WORKS, FUNDICION, SONORA. By W. P. Tucker. E. & M. J., vol. 86, p. 413. 4½ columns. I.
- PRESENT CONDITION OF THE GARFIELD SMELTING WORKS. By L. S. Austin. Min. & Sci. Press, vol. 99, p. 590. 2½ columns.
- SMELTING PLANT OF THE BUTTE REDUCTION WORKS. By A. H. Wethey. E. & M. J., vol. 88, p. 1153. 7 columns. I.
- THE SMELTERS AT ANACONDA. By E. P. Mathewson. E. & M. J., vol. 86, p. 130. 2 columns.
- THE TAKILMA SMELTER, OREGON. By Geo. Crevar. E. & M. J., vol. 85, p. 365. 1½ columns.
- MINING AND SMELTING AT CERRO DE PASCO, PERU. By C. C. Sample. E. & M. J., vol. 85, p. 206. 12 columns. I.
- SMELTING AT CERRO DE PASCO, PERU. By L. W. Strauss. Min. & Sci. Press, vol. 97, p. 637. 15½ columns. I.
- SMELTING WORKS AT RIO BLANCO, PERU. Min. & Sci. Press, vol. 97, p. 465. 2 columns. I.
- SMELTING AT NISHNI TAGIL IN THE URAL MOUNTAINS. By F. W. Draper. E. & M. J., vol. 90, p. 610. 9 columns.

- COPPER SMELTING IN TENNESSEE** By J. P. Channing. Min & Sci. Press, vol 96, p. 97 1½ columns.
- MINING AND SMELTING IN THE DUCK-TOWN DISTRICT** By E. Higgins. E. & M J., vol 86, p 1237 12½ columns I
- NOTES ON THE METALLURGY AT COPPERHILL, TENNESSEE** By G. A. Guess E. & M. J., vol. 90, p. 866. 2½ columns.
- THE TINTIC SMELTER** By L. A. Palmer M. & M., vol. 29, p. 535. 3½ columns I.
- THE TYEE SMELTER.** By R. L. Phelps. Min & Sci. Press, vol 95, p. 782. 3½ columns. I
- SMELTING PRACTICE OF THE TYEE COPPER COMPANY.** By G. W. Maynard. E. & M J., vol 88, p. 905. 11½ columns. I.
- YAMPA SMELTER, BINGHAM, UTAH.** By L. A. Palmer Min & Sci Press, vol 99, p. 225. 6½ columns I
- THE YAMPA SMELTER AT BINGHAM, UTAH.** By L. A. Palmer. M. & M., vol 31, p. 14. 8½ columns I
- THE INTERNATIONAL SMELTER AT TOOELE, UTAH.** E. & M J., vol 90, p. 1059. 6½ columns. I.
- THE NEW INTERNATIONAL SMELTER AT TOOELE, UTAH.** By J. Tyssowski. E. & M. J., vol. 89, p. 865. 7 columns. I.
- THE TOOELE SMELTER.** By C. M. McGregor. M & M., vol. 31, p. 321. 5½ columns. I
- NOTES ON COPPER SMELTING IN THE WEST.** By E. D. Peters. E & M. J., vol. 88, p. 735. 4 columns.
- See also CONCENTRATION, and THE COPPER TRADE, also COST OF METALLURGICAL TREATMENT.
- Blast Furnace Smelting of Copper**
- PRACTICAL BLAST FURNACE MANAGEMENT** By Randolph Bolling. E. & M. J., vol. 85, p. 989. 8 columns. I.
- BLAST FURNACE PROGRESS.** By J. Birkinbine. U S G S, Mineral Resources, 1883 and 1884, vol. 14.
- A BLAST FURNACE OF OVAL SECTION.** E. & M J., vol 87, p 853 3½ columns. I.
- SOME MODIFICATIONS IN BLAST FURNACE CONSTRUCTION** By J. Kennedy. P. E. Soc. W. Pa., vol. 23, p. 1. 14 pages. I
- BLAST FURNACE STOCK-HANDLING AND CHARGING APPARATUS** By W. H. Graham J. M Soc N. S., vol. 15, p. 107 4 pages. I.
- ON THE USE OF RAW COAL IN BLAST FURNACES** Min. Mag., vol 8, p 1.
- TOPS OF COPPER BLAST FURNACES.** By N H. Emmons. T. A. I. M. E., vol 41, p. 723. 10 pages I.
- CIRCULAR COPPER BLAST FURNACES.** By T E. Lambert. M & M., vol. 31, p 20. 6½ columns. I.
- ALUMINA IN COPPER BLAST FURNACE SLAGS.** E & M. J., vol. 86, p 1262. 5 columns.
- ROLE OF ALUMINA IN COPPER BLAST FURNACE SLAGS** By L G Smith. E. & M J., vol 90, p 1260 5½ columns.
- NEW COPPER BLAST FURNACES AT TEZINTLAN SMELTERY.** By C. Robinson E. & M J., vol 88, p. 655 4 columns I.
- THE CHARGING OF BLAST FURNACES.** By E. H. Messiter. Min. & Sci. Press, vol. 95, p. 528. 8½ columns I
- BLAST FURNACES IN THE GRANBY SMELTER.** M. & M., vol 30, p 525. 2 columns. I.
- BLAST FURNACES AT THE YAMPA SMELTER, BINGHAM, UTAH.** M. & M., vol 31, p 16. 2½ columns.
- THE CANANEA BLAST FURNACE** By C. F. Shelby. E. & M. J., vol 85, p. 841. 16 columns. I.
- COPPER BLAST FURNACE SMELTING AT ANACONDA** By C. Offerhaus. E. & M J., vol. 88, p. 243. 19 columns. I.

THE CORROSION OF WATER-JACKETS OF COPPER BLAST FURNACES. By G. B. Lee T. A. I. M. E., vol. 38, p. 877 9 pages

THE CORROSION OF WATER-JACKETS OF COPPER BLAST FURNACES: Discussion on the paper of G. B. Lee. Trans., vol. 388, p. 877
T. A. I. M. E., vol. 39, p. 806.
10 pages

See also METALLURGY OF COPPER

Pyritic Smelting of Copper

THE DEVELOPMENT OF PYRITIC SMELTING. By R. C. Sticht T. A. I. M. E., vol. 11, p. 1 70 pages.

PYRITE SMELTING AND SULPHURIC ACID MANUFACTURE By F. J. Felding and J. P. Channing. E. & M. J., vol. 90, p. 555. 10½ columns D

NEGATIVE RESULTS IN PYRITIC SMELTING E. & M. J., vol. 85, p. 325 4 columns; p. 373, 4½ columns.

PYRITE SMELTING BY KUNDSSEN METHOD IN NORWAY By E. Kundsén E. & M. J., vol. 87, p. 1080. 11½ columns I

KUNDSSEN PROCESS OF PYRITIC CONVERTER SMELTING. By O. Bergström. Min. & Sci. Press, vol. 98, p. 858 2½ columns.

NOTES AND COMMENTS ON THE PYRITIC PROCESS OF MOUNT LYELL, TASMANIA By R. Nicholls P. C. M. & M. Soc. S. A., vol. 7, p. 135, 8 columns, p. 214, 4 columns; p. 290, 5 columns.

PYRITIC SMELTING IN LEADVILLE. By C. H. Doolittle and R. P. Jarvis. T. A. I. M. E., vol. 41, p. 709. 14 pages

PYRITIC SMELTING IN TILT COVE, NEWFOUNDLAND. By F. S. Nicholls. E. & M. J., vol. 86, p. 462 4½ columns. I.

Reverberatory Smelting of Copper

REVERBERATORY VS. BLAST FURNACES. By H. P. Collins. E. & M. J., vol. 89, p. 619. 2 columns.

REVERBERATORY COPPER SMELTING. By E. B. Wilson. M. & M., vol. 31, p. 557. 8½ columns I

REGENERATIVE REVERBERATORY COPPER FURNACE. By F. A. Leas. E. & M. J., vol. 86, p. 898 8 columns I.

THEORETICAL NOTES ON REVERBERATORY FURNACES By C. A. Grabill. E. & M. J., vol. 89, p. 826 8½ columns

REVERBERATORY FURNACE PRACTICE. By W. A. Heywood E. & M. J., vol. 89, p. 407. 1½ columns

RECENT REVERBERATORY SMELTING PRACTICE By R. R. Moore E. & M. J., vol. 89, p. 1021, 10½ columns; p. 1063, 7½ columns.

REVERBERATORY FURNACE SMELTING OF ORES By T. J. Dyson T. A. I. M. E., vol. 5, p. 71 4½ pages.

MAGNETIC OXIDE IN MATTE. By E. L. Larison. E. & M. J., vol. 87, p. 1195 3 columns

SMELTING COPPER IN SMALL REVERBERATORY FURNACES. By E. M. Clark Min. & Sci. Press, vol. 100, p. 579 7 columns I

OIL-FIRED REVERBERATORY FURNACES By R. L. Herrick. M. & M., vol. 30, p. 367. 4 columns. I.

BURNING REVERBERATORY ASH AT THE STEPTOE PLANT By L. Duncan E. & M. J., vol. 90, p. 1302. 2 columns.

MODERN REVERBERATORY SMELTING OF COPPER ORE. By C. Offerhaus. E. & M. J., vol. 85, p. 1189, 7 columns, I, p. 1234, 12 columns, I.

REVERBERATORY FURNACES AT BINGHAM, UTAH, IN THE YAMPA SMELTER. M. & M., vol. 31, p. 15. 2 columns. I

EXPERIMENTS IN REVERBERATORY PRACTICE AT CANANEA, MEXICO By L. D. Ricketts. T. I. M. & M., vol. 19, p. 147. 39 pages I

EXPERIMENTS IN REVERBERATORY PRACTICE, CANANEA. By L. D. Ricketts. E. & M. J., vol. 89, p. 314. 15 columns. I.

REVERBERATORY PRACTICE AT CERRO DE PASCO. E. & M. J., vol. 89, p. 959. 2½ columns.

Bessemerizing of Copper Matte

SUCCESSIVE STAGES IN FLAME OF COPPER CONVERTER. By D. M. Levy E. & M. J., vol. 90, p. 1207. 4 columns.

OPERATION OF AN ANACONDA COPPER CONVERTER. By C. Offerhaus. E. & M. J., vol. 86, p. 747. 17½ columns. I

THE BEHAVIOR OF COPPER-MATTE AND COPPER-NICKEL MATTE IN THE BESSEMER CONVERTER. By D. H. Browne. T. A. I. M. E., vol. 41, p. 296. 20½ pages. D

COOLING COPPER CONVERTER SLAGS, By F. C. Kelley. M. & M., vol. 29, p. 78. 2 columns. I.

COPPER CONVERTERS, HYDRAULICALLY OPERATED. By G. B. Shipley. Min & Sci Press, vol. 95, p. 375. 4 columns.

MOVABLE CONVERTER HOODS. By A. H. Wethey. E. & M. J., vol. 85, p. 100. 4 columns. I

THE LAIST AND TANNER MOVABLE CONVERTER HOOD. By L. S. Austin. Min & Sci Press, vol. 95, p. 400. 2 columns. I

COPPER CONVERTER FLAMES. By D. M. Levy. M. & M., vol. 31, p. 719. 2½ columns.

RECENT PRACTICE IN COPPER MATTE CONVERTING. By R. R. Moore. E. & M. J., vol. 90, p. 460. 16 columns. I.

THE TREATMENT OF OVERBLOWN CHARGES IN COPPER CONVERTERS. By A. R. McKenzie. E. & M. J., vol. 90, p. 1147. 2½ columns.

MODERN TYPE OF THE BARREL COPPER CONVERTER. By C. F. Shelby. E. & M. J., vol. 88, p. 815. 5 columns. I.

THE VORTEX COPPER CONVERTER. By H. Haas. E. & M. J., vol. 89, p. 972. 6½ columns. I.

BASIC LINED CONVERTERS FOR LEADY COPPER MATTES. By R. R. Moore. E. & M. J., vol. 90, p. 263. 5 columns.

RECENT PATENTS FOR BASIC-LINED COPPER CONVERTERS. By R. H. Vail. E. & M. J., vol. 89, p. 563. 6½ columns. I

COPPER CONVERTERS WITH BASIC LINING. By R. R. Moore. E. & M. J., vol. 89, p. 1317. 11 columns.

A MACHINE FOR CASTING CONVERTER COPPER. By J. H. Klepinger. E. & M. J., vol. 85, p. 903. 5 columns. I.

RELATIVE ELIMINATION OF IRON, SULPHUR, AND ARSENIC IN BESSEMERIZING COPPER-MATTES. By E. P. Mathewson. T. A. I. M. E., vol. 38, p. 154. 6 pages.

Refining of Copper

ELECTROLYTIC COPPER REFINERY. Min & Sci. Press, vol. 101, p. 75. 1½ columns.

ELECTROLYTIC REFINING OF COPPER. By G. H. Blakemore. M. & M., vol. 30, p. 648. 8½ columns. I.

ELECTROLYTIC REFINING OF COPPER. By G. H. Blakemore. M. & M., vol. 30, p. 746. 9½ columns. I.

A STUDY IN REFINING AND OVERPOLING ELECTROLYTIC COPPER. By H. O. Hofman, R. Hayden, and H. B. Hallowell. T. A. I. M. E., vol. 38, p. 171. 24 pages. I.

ELECTROLYTIC COPPER REFINING IN AUSTRALIA. By G. H. Blackmore. E. & M. J., vol. 90, p. 717, 10½ columns, I.; p. 769, 6 columns.

AN AUSTRALIAN ELECTROLYTIC COPPER REFINERY. By R. G. Casey, Jr. E. & M. J., vol. 90, p. 1111. 11½ columns. I.

EFFECT OF TEMPERATURE ON THE ELECTROLYSIS OF COPPER. E. & M. J., vol. 86, p. 755. 2 columns.

See also COST OF METALLURGICAL TREATMENT.

Electro-Metallurgy

ELECTRIC SMELTING OF ORE AT HEROULT, CALIFORNIA. By J. Tysowski. E. & M J., vol. 90, p. 269. 8½ columns. I

ELECTRIC SMELTING WITH THE GIROD FURNACE. By W. Borchers. E. & M. J., vol. 88, p. 1113. 13½ columns. I

ELECTRIC SMELTING IN SWEDEN. By E. J. Ljungberg. M. & M., vol. 30, p. 288. 2½ columns. I

ELECTRIC SMELTING By G. H. Clavenger U. S. G. S., Mineral Resources, 1905 12 pages

THE ELECTRIC FURNACE Its Place in Siderurgy. By P. McNiven Bennie. P. E. Soc. W. Pa., vol. 26, p. 487 45 pages. I

THE POSITION OF THE ELECTRIC FURNACE By P. McN. Bennie E. & M J., vol. 88, p. 84. 1½ columns.

ELECTROLYSIS IN METALLURGY OF COPPER, LEAD, ZINC, AND OTHER METALS. By C. O. Mailloux. U. S. G. S., Mineral Resources, 1882, vol. 17. 32 pages.

THE STASSANO ELECTRIC FURNACE. By F. C. Perkins. M. & M., vol. 29, p. 277. 2 columns. I

RECENT IMPROVEMENTS IN ELECTROLYTIC CELLS. By H. S. Renaud. E. & M J., vol. 85, p. 405 3½ columns. I

NEW RESISTANCE AND INDUCTION FURNACES. By A. Gradenwitz. E. & M. J., vol. 87, p. 364. 3½ columns. I

See also **COST OF METALLURGICAL TREATMENT.**

Glass Making

HISTORY OF GLASS MAKING. By G. A. Macbeth P. E. Soc. W. Pa., vol. 23, p. 625 21 pages D

QUESTIONS ARISING IN THE MAKING OF GLASS. By R. L. Frink. P. E. Soc. W. Pa., vol. 23, p. 646. 10 pages I

GLASS MAKING. Min. & Sci. Press, vol. 20, p. 57. 2 columns.

See also **OCCURRENCE OF GLASS SANDS.**

Metallurgy of Gold and Silver

PREPARATION OF THE ORES OF SILVER-LEAD, AND COPPER, AND THEIR METALLURGICAL TREATMENT AT THE WORKS AT LOZÈRE, FRANCE By M. Lau Min. Mag., vol. 7, p. 219, 11½ pages; p. 470, 6 pages

THE METALLURGICAL TREATMENT OF THE SULPHO TELLURIDE ORES OF KALGOORLIE, WITH SPECIAL REFERENCE TO EXPERIMENTS CONDUCTED AND SULPHIDE MILL ERECTED ON THE ASSOCIATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED. By L. W. Grayson T. Au I. M. E., vol. 7, p. 170, 20 pages; vol. 8, pt. 1, p. 114, 13 pages

EXTRACTION OF GOLD BY HYPOSULPHITE OF SODIUM, AND ROASTING ORE FOR CYANIDING By E. Janitzky. T. Au I. M. E., vol. 7, p. 99. 3 pages.

THE SOLUBILITY OF GOLD IN THIO-SULPHATES AND THIOCYANATES. By H. A. White. P. C. M. & M., Soc. S. A., vol. 6, p. 109, 4½ columns; p. 197, 1 column; p. 225, 2 columns; p. 274, 1½ columns

ON THE LIXIVIATION OF AN AURIFEROUS ARSENOFERRITE CONCENTRATE. By T. T. Fulton J. M. Soc. N. S., vol. 10, p. 97. 27½ pages D

THIOCARBANIDE: A New Solvent for Gold By J. Moir. P. C. M. & M. Soc. S. A., vol. 6, p. 332. 9 columns.

HYDROMETALLURGY OF COBALT ORES. By E. B. Wilson M. & M., vol. 31, p. 303. 9 columns. I

See also **CYANIDING GOLD, ETC., METALLURGY OF LEAD, AND COST OF METALLURGICAL TREATMENT.**

Smelting Gold and Silver

BLAST FURNACE GASES IN SILVER-LEAD SMELTING. By L. S. Austin. Min. & Sci. Press, vol. 97, p. 364. 1½ column.

HEAT OF FUSION OF SILVER-LEAD BLAST FURNACE SLAG. By L. S. Austin. Min. & Sci. Press, vol. 96, p. 567. ½ column.

CALCULATION OF A SILVER-LEAD BLAST FURNACE CHARGE. By J. A. Barr. Min. & Sci. Press, vol. 101, p. 672, 3 columns; p. 710, 3 columns.

SILVER-LEAD SMELTING IN TASMANIA. By T. Kapp. E. & M. J., vol. 89, p. 727. 3½ columns.

SILVER-LEAD SMELTING PRACTICE. By L. S. Austin. Min. & Sci. Press, vol. 95, p. 59. 1½ columns.

SILVER-LEAD SMELTING AT EAST HELENA, MONTANA. E. & M. J., vol. 87, p. 350. 1 column.

SMELTER OF PENOLAS COMPANY, MAPIMI, MEXICO. By C. T. Rice. E. & M. J., vol. 86, p. 373. 6 columns. I.

MODERN SILVER-LEAD SMELTING AT LAURUM, GREECE. By H. F. Collins. E. & M. J., vol. 87, p. 881. 8½ columns. I.

See also **THE METALLURGY OF LEAD.**

CHANCELLORSVILLE GOLD AND SILVER ORE REDUCTION COMPANY. Min. Mag., vol. 9, p. 451. 4 pages.

METALLURGICAL CONDITIONS AT COBALT, ONTARIO, CANADA, 1908. By F. N. Flynn. J. C. M. I., vol. 11, p. 293. 42 pages.

THE SMELTING OF COBALT ORES. By H. W. Hixon. J. C. M. I., vol. 10, p. 74. 2½ pages.

THE REDUCTION OF AURIFEROUS ORES. By C. F. Stansbury. Min. Mag., vol. 2, p. 239. 5½ pages.

METALLURGY OF THE KALGOORLIE GOLDFIELD. By G. W. Williams. E. & M. J., vol. 85, p. 345. 11 columns. I.

THE PEARCE GOLD-SEPARATION PROCESS. By H. V. Pearce. T. A. I. M. E., vol. 39, p. 722. 12 pages.

Cyaniding, Processes, Theory, Etc.

THE ACTION OF CYANIDE OF POTASSIUM ON GOLD AND SOME OTHER METALS AND MINERALS. By G. A. Goyder. T. A. I. M. E., vol. 1, p. 84. 15 pages. I.

THEORY OF THE DISSOLUTION OF METALS BY CYANIDE. By J. B. Stuart. Min. & Sci. Press, vol. 101, p. 180. 2½ columns.

CYANIDATION OF ORE CONTAINING BOTH COARSE AND FINE GOLD. Min. & Sci. Press, vol. 95, p. 709, 2½ columns; p. 742, 1 column; p. 775, 2½ columns.

TESTS ON ACID REGENERATION OF CYANIDE SOLUTIONS. By R. P. Wheelock. Min. & Sci. Press, vol. 99, p. 814. 10 columns. I.

TABLE FOR STANDARDIZING SUMP SOLUTIONS. By C. W. Hess. Min. & Sci. Press, vol. 101, p. 445. Table.

THE DETERMINATION OF CONSTANTS IN WORKING CYANIDE SOLUTIONS. By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 5, p. 13, 7½ columns; p. 54, 7½ columns.

RAPID ESTIMATION OF PULP IN CYANIDE TANKS. By M. R. Lamb. E. & M. J., vol. 89, p. 160. 2 columns.

SPECIFIC GRAVITY ESTIMATION OF PULP. By F. B. Hyder. M. & M., vol. 31, p. 715. 3½ columns. D.

CARBON AND CELLULOSE IN CYANIDE SOLUTIONS. By A. J. Clark and W. J. Sharwood. Min. & Sci. Press, vol. 100, p. 554. 5 columns.

GRAPHITE: AN OBSTACLE TO GOOD CYANIDING. By M. W. Von Bernwita. Min. & Sci. Press, vol. 99, p. 758. 2½ columns. I.

TWO DETERRENTS TO THE DISSOLUTION OF FREE GOLD IN THE CYANIDE PROCESS. By D. Simpson. T. A. I. M. & M., vol. 17, p. 330. 1 page.

- CYANIDATION OF RAW PYRITIC CONCENTRATES P. C. M. & M. Soc. S. A., vol. 7, p. 422 $\frac{1}{2}$ column.
- CYANIDATION OF SULPHIDES. By M. N. Colman. Min. & Sci. Press, vol. 101, p. 308. 3 columns.
- RECOVERY OF ZINC FROM SOLUTIONS. M. & M., vol. 30, p. 378 $1\frac{1}{2}$ columns
- THE LABORATORY IN ITS RELATION TO THE CYANIDE PROCESS. By G. A. Byrn. T. Au. I. M. E., vol. 4, p. 173. $13\frac{1}{2}$ pages.
- THE ELIMINATION OF GOLD BEARING SOLUTION FROM SANDS. By W. A. Caldecott and A. McA. Johnston. P. C. M. & M. Soc. S. A., vol. 8, p. 153. $1\frac{1}{2}$ columns. I.
- OXIDATION AND CYANIDATION. By H. A. Megraw. E. & M. J., vol. 88, p. 645. $4\frac{1}{2}$ columns. D.
- THE DESTRUCTION OF CYANIDE. By J. Moir. P. C. M. & M. Soc. S. A., vol. 10, p. 433. $32\frac{1}{2}$ columns D.
- CHEMISTRY OF THE BROMO-CYANOGEN PROCESS. By S. H. Warrell. Min. & Sci. Press, vol. 98, p. 356. $2\frac{1}{2}$ columns.
- See also CHEMICAL ANALYSIS IN CYANIDING
- BROMO-CYANIDING OF GOLD ORES. By E. W. Nardin. Min. & Sci. Press, vol. 97, p. 562. $5\frac{1}{2}$ columns
- BROMO-CYANIDING OF GOLD ORES By E. W. Nardin. T. Au. I. M. E., vol. 12, p. 69. 10 pages.
- ACTION OF ALKALINE SOLUTIONS IN CYANIDING. P. C. M. & M. Soc. S. A., vol. 8, p. 281. $2\frac{1}{2}$ columns.
- LIME REACTION IN CYANIDING. By T. P. Holt. M. & M., vol. 31, p. 475 $1\frac{1}{2}$ columns
- NOTES ON THE ESTIMATION OF CAUSTIC LIME. By E. H. Croghan P. C. M. & M. Soc. S. A., vol. 8, p. 37, 11 columns; p. 84, $1\frac{1}{2}$ columns; p. 122, 11 columns; p. 145, $\frac{1}{2}$ column; p. 183, 8 columns; p. 206, 6 columns.
- LABORATORY TESTS ON THE USE OF COARSE AND FINE LIME FOR CYANIDING By W. J. Sharwood P. C. M. & M., Soc. S. A., vol. 8, p. 293. $9\frac{1}{2}$ columns. D
- AUTOMATIC ZINC DUST FEEDER. By J. S. Colbath E. & M. J., vol. 89, p. 453. 2 columns I
- A NOVEL WASHING AND LEACHING APPARATUS. By A. Gradenwitz E. & M. J., vol. 86, p. 227 2 columns I.
- NEW CYANIDE DEVICE. By L. Fraser. Min. & Sci. Press, vol. 101, p. 504 $2\frac{1}{2}$ columns. I.
- A CHEAP FORM OF CYANIDE PLANT. By C. Hunter. T. I. M. & M., vol. 17, p. 268. 8 pages
- HOME-MADE CYANIDE PLANT By W. F. Boericke and B. L. Eastman. Min. & Sci. Press, vol. 97, p. 712. $1\frac{1}{2}$ columns.
- A ROTARY EXTRACTOR FOR PRECIOUS METALS FROM SOLUTIONS. By W. D'Arcy and E. T. Rand. P. C. M. & M., Soc. S. A., vol. 10, p. 201 6 columns. I.
- THE KIDNEY PULP DISTRIBUTOR By C. T. Rice E. & M. J., vol. 90, p. 1046 $3\frac{1}{2}$ columns. I
- CYANIDATION WITH THE BROWN VAT. By F. Narvaez Min. & Sci. Press, vol. 95, p. 689. $1\frac{1}{2}$ columns I.
- A MODIFICATION OF PACHUCA-TANK PRACTICE. By A. J. Yager. Min. & Sci. Press, vol. 101, p. 539 2 columns. I.
- CONTINUOUS AGITATION SYSTEM AT ESPERANZA. By M. A. Kuryla E. & M. J., vol. 90, p. 213. $3\frac{1}{2}$ columns. I.
- AIRLIFT AGITATION IN CYANIDING P. C. M. & M. Soc. S. A., vol. 8, p. 358. $1\frac{1}{2}$ columns.
- NOTES ON AIR AGITATION By M. R. Lamb E. & M. J., vol. 86, p. 901 3 columns.
- AGITATION BY COMPRESSED AIR By F. C. Brown Min. & Sci. Press, vol. 97, p. 424 $6\frac{1}{2}$ columns I

- ASSISTING THE SOLUTION OF GOLD IN THE CYANIDE PROCESS BY COMPRESSED AIR. By A F Crosse P. C M & M Soc. S A., vol 8, p 36. 1 column
- See also COMPRESSED AIR IN MINING.
- CYANIDE LIXIVIATION BY AGITATION. By W M. Brodie. E. & M J, vol 87, p. 695. 3½ columns I.
- A NEW METHOD OF AGITATING CYANIDE PULPS. By E G. Spilsbury E. & M. J, vol. 89, p. 662. 3 columns
- METHODS OF PULP AGITATION. By L M Kniffen Min & Sci Press, vol 100, p. 824. 2½ columns
- AGITATOR FOR CYANIDE TESTS. By G. H. Clevenger. Min. & Sci Press, vol. 98, p. 759. 1 column. I
- BROWN TYPE OF LABORATORY AGITATOR. By T. S. Lawlor. Min. & Sci Press, vol. 99, p. 197. 2½ columns. I.
- COMBINED AGITATOR AND VACUUM-FILTER FOR CYANIDING. Min. & Sci. Press, vol. 96, p. 459. 1 column. I.
- PRESENT TENDENCIES IN CYANIDE PRACTICE. By M R. Lamb E. & M. J, vol. 90, p 855 11½ columns.
- PROGRESS IN CYANIDATION IN 1909. By A. James. Min & Sci. Press, vol 98, p 47. 13 columns I
- IMPROVEMENTS IN THE CYANIDE PROCESS. By B. MacDonald Min. & Sci. Press, vol. 100, p. 798. 4 columns. I.
- CYANIDE PRACTICE. By A James. Min & Sci. Press, vol 100, p. 41. 12 columns. I
- PROPOSED SIMPLIFICATION OF THE CYANIDE PROCESS. By B Mierisch. E & M J., vol 89, p. 1327. 4 columns. I.
- PROGRESS AND DEVELOPMENTS IN CYANIDE PRACTICE. By M. R. Lamb. E & M. J, vol. 89, p. 178. 5 columns.
- HISTORY OF CYANIDATION. By P Argall. Min & Sci. Press, vol. 95, p. 655, 5½ columns; p 682, 6½ columns.
- PROGRESS IN CYANIDATION. By A. James E & M J, vol 87, p. 1194. 3 columns
- NOTES ON CYANIDATION. By L. D. Bishop. E & M. J, vol. 87, p 842. 6½ columns I.
- IMPROVEMENT IN CYANIDE PRACTICE. By E G. Spilsbury. T. A I. M E., vol. 41, p. 367 12 pages. I.
- BEGINNINGS OF CYANIDATION. By J. McCombie Min Mag. London, vol. 4, p 456 2 columns
- DEVELOPMENTS IN CYANIDE PRACTICE. By P E Barbour M & M, vol. 31, p 597. 8 columns I.
- SOME MODERN METHODS IN ORE TREATMENT BY CYANIDATION. By E. O. Watt T. Au. I. M. E., vol. 9, p. 76. 18 pages. I
- NOTES ON THE WORKING OF THE McARTHUR-FOREST PROCESS FOR EXTRACTING GOLD. By G A. Goyder T Au I. M. E, vol 3, p 159 12 pages
- THE CLANCY PROCESS Lixiviation Process. By J C Clancy. Min. & Sci Press, vol. 101, p 862. 5½ columns
- THE CLANCY CYANIDE PROCESS. M. & M., vol. 31, p. 433. 3 columns.
- THE ADAIR-USHER PROCESS. By A. Adair. P. C. M. & M. Soc S. A., vol. 8, p. 331, 18½ columns, D, vol 9, p. 23, 2 columns; p 48, 5 columns; p 94, 5 columns; p. 118, 3 columns; p. 158, 7½ columns.
- THE NEW CLANCY CYANIDE PATENTS. E & M. J, vol. 90, p. 701. 9 columns.
- RECENT DEVELOPMENTS IN THE ATTEMPT TO AMEND THE CYANIDE PATENT. By G G. Tutti T. Au. I M. E., vol. 4, p. 195. 20 pages
- CYANIDATION OF CONCENTRATE. By F. C Brown Min & Sci. Press, vol. 101, p 273 1½ columns.

- CYANIDING CONCENTRATE AT TARACOL, KOREA By J. D. Hubbard. Min & Sci. Press, vol. 99, p. 471. 5½ columns.
- NOTES ON THE CYANIDE TREATMENT OF CONCENTRATES. By A. Grothe. E & M J, vol 88, p. 668. 3½ columns I
- CYANIDATION OF CONCENTRATES. By A E Drucker. Min & Sci Press, vol 100, p 416 4½ columns. I.
- NOTE ON THE CYANIDING OF CONCENTRATES BY PERCOLATION By A. L. Edwards P C. M. & M. Soc. S. A., vol. 5, p. 345. 1½ columns.
- LAST DRAININGS. By H A. White. P. C M & M Soc. S. A., vol. 7, p 239, 9 columns, D.; p. 329, 4 columns; p. 407, 8 columns, D.; vol 8, p. 15, 2½ columns
- A QUICK TREATMENT BY CYANIDE OF "BLACK SANDS." By B V Burnett. P C M. & M Soc. S A., vol 6, p 240, 2 columns; p. 277, 1 column, p 316, 1 column; p. 344, 1½ columns
- ELECTROCHEMISTRY OF SOLUTION OF GOLD IN POTASSIUM CYANIDE. P. C. M. & M Soc. S. A., vol. 10, p 21. 2½ columns.
- CONTINUOUS COLLECTION OF SAND FOR CYANIDING By W. A. Caldecott. Min. & Sci. Press, vol. 99, p. 659. 4 columns
- THE CONTINUOUS COLLECTION OF SAND FOR CYANIDING. By W. A. Caldecott. P. C. M. & M. Soc. S A., vol. 10, p. 43, 2½ columns, I; p. 142, 2 columns; p 238, 2½ columns.
- SAND COLLECTING AND WASHING. P. C. M. & M. Soc. S. A., vol. 8, p. 391. 1½ columns.
- See also SAND TREATMENT.
- NOTES ON THE PRECIPITATING EFFECTS OF SUBSTANCES CONTAINING VARIOUS FORMS OF CARBON AND CELLULOSE ON CYANIDE SOLUTIONS CONTAINING GOLD AND SILVER. By A. J. Clark and W. J. Sharwood. P. C M & M Soc. S. A., vol. 10, p. 234, 8 columns, p. 405, 1 column.
- PRECIPITATION FROM CYANIDE SOLUTIONS BY ZINC SHAVINGS AND DUST: A Comparison of Results and Costs. By A. J. Clark. P. C. M & M. Soc. S A., vol 9, p. 222, 3 columns; vol. 10, p. 205, 3 columns
- EXPERIMENTS ON THE PRECIPITATION OF GOLD FROM CYANIDE SOLUTION BY CARBON IN LIME By E. H Croghan. P C M & M Soc. S. A., vol 10, p. 391 5 columns
- PRECIPITATION OF GOLD BY CARBONACEOUS MATTER By W A. Caldecott. Min & Sci. Press, vol. 98, p. 828. 1½ columns.
- ZINC BOX WHITE PRECIPITATES. By R F Coolidge. Min & Sci Press, vol 99, p 394 4 columns.
- ELECTRICAL PRECIPITATION FROM CYANIDE SOLUTIONS. E. & M. J, vol. 89, p. 598. 1½ columns
- ELECTROLYTIC PRECIPITATION. By M. R Lamb E & M J, vol 87, p 705. 2 columns.
- PRECIPITATION OF GOLD AND SILVER BY SOLUBLE SULPHIDES E. & M. J., vol. 87, p. 841. 1½ columns
- NOTES ON PRECIPITATION. By M. Smith. P. C. M. & M, Soc S. A., vol 9, p. 300. 4½ columns; p 351, 1½ columns.
- ZINC DUST PRECIPITATION. By A. J. Clark. Min. Mag London, vol. 4, p. 289. 7½ columns. I.
- ZINC DUST PRECIPITATION AT THE HOMESTAKE MINE. By R Linton. E. & M. J, vol 88, p 199. 1½ columns.
- ZINC DUST PRECIPITATION AT CERRO-PRIETO By R. Linton. P. C. M. & M Soc. S A, vol 10, p. 60. 2½ columns.
- ZINC DUST PRECIPITATION AT MERCUR, UTAH. E. & M. J., vol 86, p. 79. 1 column.
- ZINC DUST PRECIPITATION AT CERRO-PRIETO. By Robt Linton P. C. M. & M. Soc. S. A., vol. 9, p 74, 5 columns; p. 165, 3 columns, p. 207, 1½ columns; p 232, 1 column.

- ZINC BOX PRECIPITATION AT PARRAL, MEXICO E & M J. vol 86, p. 122. 1½ columns
- THE "WHITE PRECIPITATE" OF THE PRECIPITATING BOXES IN THE CYANIDE WORKS By A. Prister P. C. M. & M. Soc. S. A., vol 5, p. 62, 1 column, p 75, 8 columns; p. 129, 10½ columns; p. 148, 5½ columns, p. 171, 6 columns; p. 310, 1½ columns
- DE WILDE PRECIPITATION PROCESS. By G. Witteveen. M & M., vol. 31, p. 342. 3½ columns.
- THE TREATMENT OF SLIMES BY CYANIDATION AND ELECTRICAL PRECIPITATION ON MERCURY By F. T Mumford T A I. M. E., vol 9, p. 96. 10 pages. I
- CYANIDING SLIME By M R. Lamb T A. I. M. E., vol 40, p. 775. 4½ pages. I.
- SLIME TREATMENT IN CYANIDING T A. I. M. E., vol. 40, p 768 6 pages I
- CYANIDING SLIME T. A I M E, vol. 40, p 775 4½ pages. I
- SETTLING SLIME IN CYANIDE TREATMENT P. C. M & M Soc S A., vol. 9, p. 411. 1 column.
- IMPROVEMENTS IN SLIME TREATMENT By M. Torrente P. C. M & M. Soc. S. A., vol. 5, p. 46, 6½ columns, I.; p 83, 1½ columns; p. 100, 1½ columns; p. 127, 3 columns; p 150, 4 columns; p 179, 3½ columns
- NOTES ON IMPROVEMENTS IN THE CYANIDE TREATMENT OF SANDS AND SLIMES. By C H Pead. P. C M. & M, Soc. S A., vol 6, p. 76, 4 columns; p. 194, 2 columns; p. 223, 3 columns, p. 249, 3½ columns
- COLLOIDAL SILICIC ACID IN SLIMES By W.A. Caldecott. P. C. M. & M. Soc. S. A., vol 7, p. 217. 1 column.
- THE TREATMENT OF ACCUMULATED SLIME, AND THE USE OF FILTER PRESSES FOR CLARIFYING SLIME SOLUTION AND BY-PRODUCTS. By J. D O'Hara. P C M. & M Soc S A., vol. 10, p. 342, 5 columns, p 403, 2 columns, I.
- TREATMENT OF A CONCENTRATE-SLIME By A. E. Drucker Min. & Sci Press, vol 96, p. 458. 5 columns. I.
- THE SEPARATION OF SLIME IN CYANIDE TREATMENT. By H. G. Nichols. Min. & Sci. Press, vol 96, p 563. 7 column I.
- TREATMENT OF SLIME IN THE CYANIDE PROCESS Min. & Sci. Press, vol. 100, p. 798 4 columns I
- SLIME TREATMENT IN CYANIDING. Min & Sci Press, vol. 100, p. 44. 5 columns I
- A METHOD OF SETTLING SLIMES, AS APPLIED TO THEIR SEPARATION FROM SOLUTION IN CYANIDE TREATMENT By H G Nichols. T. I M. & M, vol 17, p. 293. 38 pages I
- CYANIDE TREATMENT OF SLIME P. C M. & M. Soc. S. A., vol. 10, p. 322. 3½ columns.
- METHOD OF TESTING SLIME. By G. J. Young. Min. Mag, London, vol. 3, p. 133. 2½ columns I
- SLIME TREATMENT BY CYANIDATION. E & M J, vol 88, p 688. 5½ columns.
- A PROPOSED NEW SYSTEM FOR THE CYANIDE TREATMENT OF SLIMES. By F. McCann. E & M. J., vol. 88, p. 688. 5½ columns.
- CYANIDING SLIMES. E. & M. J, vol. 89, p 462. 1½ columns. I.
- ALL-SLIME TREATMENT OF ORE IN CYANIDE PLANTS. By H. A. Megraw. E. & M J., vol. 89, p. 319. 5 columns. I.
- CYANIDING SLIMES. E. & M. J, vol. 89, p. 319. 5 columns. I
- CYANIDING SLIME: Process By E. B Wilson. M. & M., vol. 29, p. 59. 6 columns. I.
- SLIME TREATMENT IN CYANIDING. By E. B. Wilson. M. & M., vol. 29, p. 59. 6 columns. I.

- SLIME TREATMENT IN CYANIDING.** M. & M., vol. 29, p. 129, 9 columns, I.; p. 187, 3 columns, I., p. 224, 6 columns, I
- SLIMING ORE FOR CYANIDATION.** By M. R. Lamb Min. & Sci Press, vol. 95, p. 658 1½ columns
- SLIME SETTLING BEFORE CYANIDING.** E & M. J., vol 87, p. 837 3 columns. I.
- ALL-SLIMING.** By E M Hamilton. Min. & Sci. Press, vol 99, p 255. 5½ columns I.
- THE CHEMICAL CONTROL OF SLIMES.** By H. E. Ashley T. A I M. E., vol. 41, p. 380 16 pages. I
- SLIME TREATMENT AT VARIOUS CYANIDE PLANTS.** Min. & Sci. Press, vol 95, p. 46. 4½ columns.
- THE UTILIZATION OF WASTE HEAT IN SLIMES TREATMENT.** By A. Salkinson. P. C. M & M. Soc S A, vol 7, p 403, 6 columns, vol 8, p. 52, 1 column; p 81, 7½ columns, p 142, 6½ columns.
- FURTHER NOTES ON THE UTILIZATION OF WASTE HEAT IN SLIMES TREATMENT** By A Salkinson P C. M & M. Soc. S. A., vol 9, p. 308. 3½ columns
- PROPOSED PROCESS FOR TREATMENT OF ZINC GOLD SLIMES BEFORE SMELTING** By C. E. Meyer. P C. M. & M. Soc. S. A., vol 6, p. 361, 6 columns; p 83, 1 column; p. 139, 2 columns
- THE DORR CONTINUOUS SLIME THICKENER.** M. & M., vol. 30, p 79. 1½ columns I.
- SLIME TREATMENT AT KALGOORLIE.** By M W. von Bernewitz. Min. & Sci Press, vol 95, p 743 2 columns I.
- SLIME TREATMENT AT THE SANTA NATALIA MILL.** By C Shapeley. E. & M. J., vol. 90, p. 358. 4 columns I.
- ALL-SLIME CYANIDE PROCESS AT HACIENDA DE LA UNION.** E & M. J., vol. 86, p. 991. 2 columns.
- SLIME TREATMENT AT THE TAJO, ROSARIO MILL, MEXICO** T. A. I M E., vol. 41, p 345 11 pages. I
- SLIME TREATMENT AT THE NORTH STAR MINES, CALIFORNIA** E & M. J., vol 90, p. 410 1 column.
- FILTER PRESS TREATMENT OF SLIMES.** By H R Edmans T Au I M E., vol 11, p. 77. 19½ pages. I
- NOTES ON THE USE OF THE FILTER PRESS FOR CLARIFYING SOLUTIONS.** By S J. Truscott and A Yates. P. C. M & M Soc. S. A, vol 7, p 3, 2½ columns; p 45, 2 columns; p 83, 2 columns; p 269, ¼ column; p. 321, 2 columns.
- FILTERING SLIMES** By E Parrish. Min & Sci Press, vol 99, p. 493. 2½ columns.
- FILTER PRESS WORK.** M. & M., vol 31, p 600 1 column I.
- FILTER PRESSING SLIMES** By M W. von Bernewitz Min & Sci. Press, vol 101, p 377. 3 columns
- FILTER PRESS WORK IN CYANIDING CONCENTRATE** Min. & Sci. Press, vol 100, p 416 3 columns I
- VACUUM FILTRATION** By A. Nichols. Min & Sci Press, vol 100, p. 395. 2 columns. I.
- FILTER PRESSING.** P. C M. & M. Soc S A, vol. 10, p. 222. ¼ column.
- THE FILTER PRESS IN CYANIDING** By E B Wilson M. & M, vol 29, p 129, 9 columns, I; p 187, 3 columns, I., p 224, 6 columns, I
- FILTERING SLIMES IN CYANIDING.** Min & Sci. Press, vol 95, p. 715. 3 columns. I
- FILTERING GOLD SLIME.** By E. Jensen E. & M. J, vol. 87, p. 902. 2 columns. I.
- CONTINUOUS VACUUM-FILTER MACHINE** By B Hunt. Min & Sci. Press, vol. 97, p. 430. 3 columns. I.
- CONTINUOUS SLIME FILTER** By R. Schott Min & Sci Press, vol. 97, p. 194. 4 columns. I.

- OLIVER CONTINUOUS FILTER By A H Martin Min & Sci Press, vol. 99, p 715. 2 columns I.
- USE OF THE OLIVER CONTINUOUS FILTER AT THE NORTH STAR MINES, CALIFORNIA. E & M J, vol. 90, p. 411. 1 column I.
- THE OLIVER FILTER PRESS AT GRASS VALLEY E & M J, vol. 87, p 440. $\frac{1}{2}$ column I.
- THE OLIVER CONTINUOUS FILTER AT MINAS DEL TAJO By G A. Tweedy and R. L Beals. E & M J, vol. 89, p. 506 5 columns. I.
- THE BURT RAPID CYANIDE FILTER. By E Burt. Min. & Sci Press, vol. 95, p 717. $3\frac{1}{2}$ columns. I.
- THE BUTTERS' SLIME-FILTER AT THE CYANIDE PLANT OF THE COMBINATION MINES COMPANY, GOLDFIELD, NEVADA By M. R Lamb T A I. M. E, vol 38, p 200. 10 pages. I
- THE BUTTERS' FILTER USED AT THE MONTEZUMA MILL, COSTA RICA E. & M. J., vol. 90, p 716 $\frac{1}{2}$ column.
- THE SWEETLAND FILTER PRESS By E J Sweetland E & M J, vol 85, p 359 3 columns I
- THE HUNT CONTINUOUS SLIME FILTER P C M & M Soc. S A., vol 10, p. 295. $1\frac{1}{2}$ columns
- FILTERING SLIMES BY RIDGEWAY FILTER E. & M. J, vol 86, p 121. 1 column.
- PRESSURE FILTRATION. By E. J. Sweetland Min. & Sci Press, vol. 99, p 853 $4\frac{1}{2}$ columns I
- THE BLAISDELL PRESSURE FILTER. Min. & Sci. Press, vol 95, p. 188. 1 column I.
- VACUUM SLIME-FILTERS AT GOLDFIELD. By A. M Smith Min. & Sci. Press, vol 99, p. 65. 2 columns.
- THE FAIRCHILD VACUUM-FILTER. Min. & Sci Press, vol. 95, p. 279. 1 column. I.
- VACUUM SLIME-FILTERS. Min & Sci. Press, vol. 95, p. 46 $4\frac{1}{2}$ columns
- IMPROVEMENTS IN THE TREATMENT OF SLIME BY THE VACUUM-FILTER PROCESS By A W Allen. E & M. J, vol. 87, p. 1004. 3 columns. I.
- VACUUM-FILTER TREATMENT OF SLIMES. E. & M J, vol 87, p 1004 3 columns. I.
- VACUUM-FILTERING OF SLIME AT WAIHI, NEW ZEALAND P. C. M & M, Soc S. A., vol 8, p 13. 2 columns
- FILTRATION OF SLIMES AT EL ORO, MEXICO. By D L. H. Forbes. E & M J, vol 86, p. 458. $3\frac{1}{2}$ columns. I.
- FILTER PRESSES AT THE TAJO, ROSARIO MILL, MEXICO T. A. I M. E., vol. 41, p 349. 12 pages
- FILTER PRESS PRACTICE IN THE HOME-STAKE MILLS. Min & Sci. Press, vol. 95, p. 21 $4\frac{1}{2}$ columns. I
- SLIME TREATMENT AT THE EL ORO MILL, MEXICO. E. & M J, vol. 87, pp. 688 and 689 4 columns.
- See also SLIMES AND THEIR TREATMENT
- SOME SUGGESTIONS ON THE CYANIDING OF TAILINGS By A Prister. P C M & M. Soc S A., vol. 5, p 338, $6\frac{1}{2}$ columns; vol. 6, p 113, $1\frac{1}{2}$ columns, p. 190, $\frac{1}{2}$ column.
- A PROPOSED METHOD OF TREATING SAND RESIDUE DUMPS. By S. J Truscott and A. Yates. P. C. M. & M. Soc S A., vol 6, p. 213. $3\frac{1}{2}$ columns, vol. 7, p. 293, 3 columns.
- THE CYANIDING OF REFRACTORY TAILINGS ON THE WITWATERSRAND. By W. H C. Lovely T. Au. I M. E., vol. 11, p. 104. 9 pages.
- RE-TREATMENT OF TAILING AT OROYA-BROWN HILL. Min. Mag London, vol 4, p. 460 $1\frac{1}{2}$ columns. I. Flowsheet
- See also SAND TREATMENT.

- CYANIDATION OF SILVER ORES. By W. J. Sharwood. Min. & Sci. Press, vol. 97, p. 418. 5 columns.
- CYANIDATION OF MANGANESE SILVER ORES. By E. M. Hamilton. Min. & Sci. Press, vol. 99, p. 756 2½ columns.
- CYANIDATION OF SILVER ORES. By F P Holt. Min. & Sci. Press, vol. 98, p. 546. 4 columns Tables.
- CYANIDATION OF SILVER ORES By T. P. Holt Min. & Sci. Press, vol. 99, p. 159 6½ columns. D
- CYANIDATION OF SILVER ORES. By D Mosher. Min & Sci Press, vol. 98, p. 691. 5½ columns. I.
- CYANIDATION OF SILVER ORES. By L. B. Kniffin. Min & Sci. Press, vol. 100, p. 322 1½ columns.
- TREATMENT OF THE MOUNT REID AURIFEROUS ORES WITH THE HELP OF CYANIDE OF POTASSIUM By L. Williams. T. Au. I. M E, vol 4, p. 45. 5 pages.
- EXPERIMENTS ON THE ASSAY OF ACID WASHES RESULTING FROM THE CYANIDE "CLEAN-UP" BY THE USE OF BISULPHATE. By L. J. Wilmoth. P. C. M & M Soc. S. A., vol. 10, p. 136. 5½ columns.
- THE USE OF THE BISULPHATE OF SODIUM IN THE CLEAN-UP. By J. E. Thomas and G. W. Williams. P. C. M & M. Soc. S A, vol 5, p. 334, 7 columns, vol. 6, p. 82, 4 columns; p. 113, ½ columns, p. 156, 3 columns.
- CYANIDE WORKS' CLEAN-UP PRACTICE. By J. E. Thomas. P. C M. & M, Soc. S. A, vol 7, p. 109, 3 columns; p. 181, 2½ columns, p. 211, 5 columns; p. 268, 1½ columns.
- NOTES ON LIME, CLEAN-UP, ETC. By G W. Williams. P. C. M. & M., Soc S. A, vol. 5, p. 251, 7½ columns; p. 314, 2 columns; vol. 6, p. 19, 4 columns, p. 51, 3 columns; p. 73, 5 columns
- SOME FURTHER IMPROVEMENTS IN APPLIANCES FOR THE CYANIDE CLEAN-UP. By D V Burnett P. C. M. & M. Soc. S A, vol. 5, p. 145, 5 columns, I.; p. 211, 1½ columns; p. 235, 2½ columns; p. 255, 1½ columns.
- CYANIDATION AT THE ALASKA-TREADWELL MINES By T. A. Rickard. Min Mag., London, vol. 3, p. 280. 2 columns
- CYANIDING CRIPPLE CREEK DUMPS. M & M., vol 29, p. 444 ½ column.
- CYANIDATION OF CRIPPLE CREEK ORES By P. Argall. Min & Sci. Press, vol 101, p. 804 3½ columns.
- CYANIDING AT THE MONTEZUMA MILL, COSTA RICA E. & M. J, vol 90, p. 716. 3 columns.
- CYANIDING AT THE NORTH STAR MINES, GRASS VALLEY. E. & M. J., vol 87, p. 440. 3 columns. I.
- CYANIDING AT THE NORTH STAR MINES IN CALIFORNIA. By J. Tyssowski. E. & M J, vol 90, p. 409. 8½ columns I
- CYANIDE PRACTICE AT THE HOMESTAKE MILLS. By F L Bosqui. Min & Sci Press, vol. 95, p. 21 4½ columns. I
- CYANIDING BLACK HILLS "BLUE ORES" By B. D O'Brien. M. & M, vol 29, p. 427. 9 columns.
- CYANIDING SILVER ORES IN HONDURAS By G. E Driscoll Min. & Sci. Press, vol. 98, p. 388 4½ columns I.
- RECENT CYANIDE PRACTICE IN KOREA. By A. E. Drucker. Min. & Sci. Press, vol. 97, p. 458. 6 columns
- CYANIDING AT MINAS DEL TAJO, SINALOA. E. & M. J., vol. 89. 7 columns. I.
- CYANIDE PRACTICE AT MINAS DEL TAJO, SINALOA, MEXICO. By G. A. Tweedy and R L Beals. E & M. J., vol 89, p. 566. 12 columns. I.
- CYANIDE PRACTICE AT EL TAJO MILL, JALISCO, MEXICO. E. & M. J., vol. 89, p. 274. 1½ columns. I.

- THE CYANIDE PRACTICE AT THE EL ORO MILL, MEXICO. E. & M. J., vol 87, p 683. 23 columns. I.
- CYANIDING AT TAJO, ROSARIO, MEXICO. T. A. I. M. E., vol 41, p. 339 30 pages. I
- NOTES ON THE CYANIDATION OF SILVER-GOLD ORES AT GUANAJUATO, MEXICO. By J. A. Reid J. M. Soc. N. S., vol 14, p. 37 12½ pages.
- DEVELOPMENT OF THE CYANIDE PROCESS FOR SILVER ORES IN MEXICO By B. Macdonald. E. & M. J., vol. 85, p. 802 4½ columns
- CYANIDATION OF SILVER ORES AT GUANAJUATO, MEXICO By B. Macdonald E. & M. J., vol. 85, p. 710. 23 columns. I
- PRESENT CYANIDE PRACTICE IN MEXICO By M. R. Lamb. E. & M. J., vol 85, p. 703 20 columns. I
- CYANIDING AT THE NEW ESPERANZA MILL, EL ORO, MEXICO. E. & M. J., vol 86, p. 760. 5 columns I.
- SILVER CYANIDING IN MEXICO E. & M. J., vol 86, p. 846. ¾ column
- SILVER CYANIDING IN MEXICO By J. B. Empson. E. & M. J., vol 86, p. 667 3½ columns
- CYANIDATION OF SILVER ORES, PACHUCA, MEXICO By C. T. Rice E. & M. J., vol. 86, p. 647 18½ columns. I
- CYANIDE TREATMENT AT THE JESUS MARIA AND FLORES MILLS E. & M. J., vol 86, p. 616. 10 columns.
- CYANIDING AT THE YOQUIVO MILL, WESTERN CHIHUAHUA. E. & M. J., vol. 90, p. 812 1 column
- SILVER CYANIDING AT THE SAN RAFAEL MILL, PACHUCA. By E. Girault. E. & M. J., vol. 90, p. 67. 6½ columns. I.
- CYANIDING ORES IN MEXICO By E. Girault. M. & M., vol. 30, p. 618. 5 columns. I.
- CYANIDATION OF SILVER ORE IN MEXICO. By W. A. Caldecott. Min. & Sci. Press, vol. 97, p. 294 5 columns.
- CYANIDATION IN MEXICO By F. J. Hobson Min. & Sci. Press, vol. 97, p. 159, 4 columns; p. 182, 6 columns, I.
- MILLING AND CYANIDE PRACTICE, SAN PROSPERO MILL, GUANAJUATO Min. & Sci. Press, vol. 97, p. 130. 5 columns
- CYANIDATION OF SILVER ORE IN MEXICO By W. A. Caldecott. Min. & Sci. Press, vol. 96, p. 426, 4½ columns, p. 594, 4 columns, I
- CYANIDATION OF PARRAL SILVER ORES. By H. T. Willis. Min. & Sci. Press, vol. 98, p. 488 4 columns
- CYANIDATION OF MANGANESE SILVER ORES OF MEXICO By E. M. Hamilton. P. C. M. & M. Soc. S. A., vol 10, p. 65. 3½ columns
- THE CYANIDING OF SILVER ORES IN MEXICO By A. F. J. Bordeaux. T. A. I. M. E., vol 40, p. 764, 12 pages, I., Discussion, p. 917, 2 pages
- CYANIDING AT THE TONOPAH EXTENSION MILL Min. & Sci. Press, vol 100, p. 522. 4 columns.
- CYANIDING AT THE FLORENCE GOLDFIELD MILL E. & M. J., vol 89. p. 367 2 columns
- CYANIDING AT THE MONTGOMERY-SHOSHONE MILL. By P. E. Saun. E. & M. J., vol. 89, p. 217. 4½ columns I.
- CYANIDING AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M., vol. 29, p. 569 8½ columns. I.
- CYANIDING AT THE DESERT MILL, MILLERS, NEVADA Min. & Sci. Press, vol. 95, p. 494 8½ columns I.
- CYANIDATION AT THE GOLDFIELD MILL. E. & M. J., vol 86, p. 471. 6 columns. I.
- CYANIDING AT GOLDFIELD, NEVADA, Min. & Sci. Press, vol. 96, p. 843 1 column
- CYANIDATION IN NEVADA. By A. G. Kirby. Min. & Sci. Press, vol. 96, p. 836. 8 columns.

CYANIDATION IN NEVADA. By L. M. King. Min. & Sci. Press, vol. 96, p. 123 5½ columns.

CYANIDING THE ORES OF EASTERN OREGON By A. Del Mar. E & M. J., vol 89, p 667 2 columns.

CYANIDATION IN THE MALAY STATES. By H F Lofts. P. C. M & M. Soc S A, vol 8, p. 340. 3 columns.

RECONSTRUCTION OF THE AUGUSTIAS CYANIDE MILL. By H A Megraw E. & M J, vol 90, p 321. 6 columns. I

CYANIDING AT THE ASHANTI GOLDFIELDS E & M. J., vol. 89, p 459. 1½ columns

CYANIDATION AT MERCUR, UTAH. By L. A. Palmer. Min & Sci Press, vol 98, p 616 7 columns I.

CYANIDING AT THE PITTSBURG SILVER PEAKS PLANT. Min & Sci Press, vol. 98, p. 659. 4½ columns

DIRECT CYANIDING ON THE RAND E. & M J., vol 87, p. 883. ½ column

See also THE METALLURGY OF GOLD AND SILVER.

See also COST OF METALLURGICAL TREATMENT.

Cyaniding Plants

VARIABLES INFLUENCING CYANIDE PLANT DESIGN By M. R. Lamb. E. & M J, vol 90, p 8 2½ columns I.

SMALL CYANIDE PLANTS. E. & M. J. vol. 86, p 457. 1 column.

HOMEMADE CYANIDE PLANT. P C. M. & M. Soc S. A, vol. 9, p. 278. 2 columns.

CYANIDING AT THE MONTANA-TONOPAH MINING COMPANY'S PLANT Min. & Sci. Press, vol. 97, p. 324. 7½ columns. I

CYANIDING AT THE NEVADA GOLDFIELD REDUCTION WORKS. Min & Sci. Press, vol 97, p. 254. 2½ columns. I

THE STANDARD CONSOLIDATED CYANIDE MILL By S. F. Shaw E. & M. J, vol 87, p 483. 6½ columns I

CYANIDING AT PLANT OF THE SIMMER DEEP AND JUPITER REDUCTION WORKS Min & Sci Press, vol 99, p. 397 5 columns. I

A SKETCH OF THE SMALL CYANIDE PLANT AS ERRECTED AND WORKED IN RHODESIA By F J. Thomas. P C M. & M Soc. S A, vol 10, p. 82, 7 columns; p. 207, 2½ columns

SLIME PLANT OF THE SIMMER DEEP AND JUPITER REDUCTION WORKS. Min & Sci Press, vol. 99, p. 398 1½ columns.

CYANIDE MILLS, GUANAJUATO DEVELOPMENT COMPANY. By C. T Rice E. & M J, vol. 86, p. 947, 11½ columns, I; p 997, 15 columns, I.

VETA COLORADO CYANIDE MILL, PARRAL, MEXICO By C T Rice E & M J., vol. 86, p 120 8 columns.

AN ALL-SLIME CYANIDE PLANT AT GUANAJUATO, MEXICO By E Shapley. E. & M J, vol 88, p. 68. 1½ columns.

CYANIDE PLANT AND PRACTICE AT THE MINAS DEL TAJO, ROSARIO SINALOA, MEXICO. By G. A. Tweedy and R. L. Beals. T. A. I. M. E., vol. 41, p 324. 56 pages. I.

DESCRIPTION OF A CHEAP CYANIDE PLANT ERRECTED IN WESTERN AUSTRALIA By E M Weston P C. M & M Soc S. A, vol 5, p. 23. 2½ columns.

REGENERATING COPPER CYANIDE SOLUTION By R. P Wheelock Min. & Sci. Press, vol. 100, p. 397. 3 columns

See also FINE CRUSHING BY MILLS, ETC

Chlorination Processes

CHLORINATION IN CALIFORNIA. By W E Darrow. Min & Sci. Press, vol. 97, p. 609. 3½ columns.

REFINING GOLD BY CHLORINE GAS. Min. & Sci. Press, vol 22, p 278, 1½ columns; p 297, 1½ columns

THE MALM DRY CHLORINATION PROCESS By R L Herrick M. & M, vol. 30, p 370. 9 columns. I.

MALM PROCESS IN COLORADO A Dry Chlorination Process By F. Rickard. Min & Sci Press, vol. 99, p 662. 2½ columns

DRY CHLORINATION OF SULPHIDE ORES By F. W. Traphagen. Min. & Sci Press, vol. 98, p. 522. 2 columns. Table.

DRY CHLORINE PROCESS: The Chlorination of Complex Ores Containing Precious Metals, Together with Zinc, Lead and Iron By F W Traphagen. M. & M, vol 29, p 449 4½ columns

CHLORINATION OF GOLD ORES; LABORATORY TESTS: Discussion of the paper by A. L Sweetser, Trans., vol 38, p. 236 T A. I. M. E., vol. 39, p 793. 2½ pages.

See also COST OF METALLURGICAL TREATMENT

Refining Gold and Silver

FLUXING OF GOLD SLIMES By C E. Mayer P. C M. & M Soc. S A, vol 5, p. 168, 4 columns, p. 211, 1½ columns, p 341, ½ column, vol. 6, p. 17, 1 column.

TREATMENT OF THE GOLD AND SILVER PRECIPITATE AT DOS ESTRELLAS By W. Neal. Min & Sci Press, vol 98, p. 327. 2 columns.

SMELTING GOLD PRECIPITATES AND BULLION WITH OIL FUEL By A. Yates. E. & M. J, vol. 88, p. 473. 3½ columns.

ELECTROLYTIC REFINING OF BULLION IN THE UNITED STATES MINTS. By H. J Slaker. E. & M. J., vol. 90, p. 214. 2 columns.

ELECTROLYTIC REFINING OF GOLD. By B. T. K. Rose Min. & Sci. Press, vol. 98, p 890. 1 column.

THE CLEAN-UP, MELTING AND REFINING OF GOLD BULLION. By G W Williams. Min. & Sci. Press, vol 95, p. 277. 5 columns

REFINING OF SILVER BULLION CONTAINING ARSENIC AND ANTIMONY. By B. Neilly. J. C. M I, vol 11, p 586. 6 pages I.

BATTERY AND CYANIDE GOLD SMELTING By A. Thomas P. C M & M Soc S A, vol. 9, p 6, 6 columns; p 50, 2 columns; p. 120, 5 columns; p 162, 5½ columns; p 191, 4 columns

RESULTS OF BAG-HOUSE EXPERIMENTS IN CONNECTION WITH TAVENER'S PROCESS. By H. Rusden P C M & M. Soc S. A, vol 5, p 288 2 columns. I.

THE TAVENER PROCESS By K. L Graham. P C M & M. Soc S A, vol 5, p. 315. 2 columns.

See also COST OF METALLURGICAL TREATMENT.

Metallurgy of Iron and Steel

ABOUT SOME OF THE PROPERTIES OF STEEL By A E Hunt P. E. Soc W Pa, vol 2, p 271, 8 columns, p 251, 6 pages

THE SOLID NON-METALLIC IMPURITIES IN STEEL (SONIMS). By H. D. Hibbard. T A. I. M E., vol. 41, p. 803. 20 pages.

ON THE CHEMICAL CHANGES WHICH PIG IRON UNDERGOES DURING ITS CONVERSION INTO WROUGHT IRON. By F. C. Calvert. Min Mag., vol 9, p 487 6 pages.

THE DETERIORATING EFFECT OF "ACID PICKLE" ON STEEL RODS, AND THEIR PARTIAL RESTORATION ON "BAKING." P. C. M & M Soc. S A., vol. 7, p. 424. 2½ columns.

NOTE ON SOME CAUSES OF RED-SHORTNESS AND COLD-SHORTNESS IN IRON. By W Metcalf. P E. Soc. W Pa, vol. 2, p 217. 2 columns; p. 219, 2 columns.

CRYSTALLIZATION OF IRON AND STEEL.

By A. M. Johnston. P. C. M. & M. Soc. S. A., vol. 10, p. 3. 15 columns.

ON THE COMPOUNDS OF CARBON AND IRON, AND THEIR INFLUENCE ON THE PRODUCTION OF PIG IRON By A. Gurlt. Min. Mag., vol. 8, p. 40, 7 pages; p. 123, 6 pages.**CARBON AND THE PROPERTIES OF CAST IRON** By H. M. Howe. E. & M. J., vol. 86, p. 943. 12 columns.**THE CARBON-IRON DIAGRAM.** By H. M. Howe. T. A. I. M. E., vol. 39, p. 3. 68½ pages. I.**A SIMPLE IDENTIFICATION TEST FOR IRON AND STEEL.** P. C. M. & M. Soc. S. A., vol. 10, p. 326. 3½ columns.**HEAT TREATMENT OF STEEL RAILS,** By W. Metcalf. P. E. Soc. W. Pa., vol. 24, p. 135. 19½ pages. I.**MALLEABLE CAST IRON.** By B. Stoughton. Sch. Mines Quart., vol. 29, p. 54. 9 pages.**STEEL CASTINGS.** P. E. Soc. W. Pa., vol. 25, p. 333. 21 pages. I.**EXTRACTION OF IRON FROM ORE AND PULP.** By W. C. Brown. E. & M. J., vol. 90, p. 445. 1 column. I.**SEPARATION OF SILICA AND ALUMINA IN IRON ORES.** E. & M. J., vol. 86, p. 168. 1 column.**INFLUENCE OF TOP-LAG ON THE DEPTHS OF THE PIPE IN STEEL INGOTS.** By H. M. Howe. T. A. I. M. E., vol. 40, p. 804. 2½ pages.**SEGREGATION IN STEEL INGOTS.** By H. M. Howe. Sch. Mines Quart., vol. 29, p. 238. 3 pages.**THE INFLUENCE OF INGOT-SIZE ON THE DEGREE OF SEGREGATION IN STEEL INGOTS.** By H. M. Howe. T. A. I. M. E., vol. 40, p. 644. 4 pages. I.**PIPING AND SEGREGATION IN STEEL INGOTS:** Discussion of H. M. Howe's Paper. T. A. I. M. E., vol. 38, p. 924. 11 pages. I.**THE INFLUENCE OF THE CONDITIONS OF CASTING ON PIPING AND SEGREGATION,** AS SHOWN BY MEANS OF WAX INGOTS. By H. M. Howe and B. Stoughton. T. A. I. M. E., vol. 38, p. 109. 17 pages. I.**PIPING AND SEGREGATION IN STEEL INGOTS** By Henry M. Howe. T. A. I. M. E., vol. 38, p. 3. 105 pages. I.**PIPING AND SEGREGATION IN STEEL INGOTS:** Discussion of the paper of H. M. Howe. Trans., vol. 38, p. 3. T. A. I. M. E., vol. 39, p. 818. 32½ pages. I.**PIPING AND SEGREGATION IN STEEL INGOTS** Discussion of Paper of H. M. Howe, vol. 38, pp. 3 and 924; vol. 39, p. 818. T. A. I. M. E., vol. 40, p. 821. 10 pages. I.**BLOW-HOLES IN STEEL INGOTS.** By E. Von Mallitz. T. A. I. M. E., vol. 38, p. 412. 34 pages.**STEEL HARDENING METALS.** By J. H. Pratt. U. S. G. S., Mineral Resources, 1903, Mineral Resources, 1904, 58 pages.**COPPER-CLAD STEEL.** By W. Tassin. E. & M. J., vol. 88, p. 813. 3½ columns.**CUPRO-NICKEL STEEL.** By G. H. Clamer. E. & M. J., vol. 90, p. 215. 2 columns.**NEW FORMS OF STEEL FOR NEW USES.** By R. B. Woodworth. P. E. Soc. W. Pa., vol. 24, p. 40. 50 pages. I.**LABORATORY METHODS FOR MAKING ALLOYS OF IRON AND VANADIUM.** By W. L. Morrison. E. & M. J., vol. 87, p. 1035. 1½ columns. I.**VANADIUM STEEL.** By J. K. Smith. P. E. Soc. W. Pa., vol. 23, p. 423. 26 pages.**VANADIUM STEEL.** M. & M., vol. 31, p. 334. 1½ columns.**MANGANESE STEEL.** By W. S. Potter. J. W. Soc. E., vol. 14, p. 212. 28 pages. I.**THE USE OF FERRO-ALLOYS.** E. & M. J., vol. 85, p. 363. ½ column.

- SOME EXPERIMENTS ON SMELTING TITANIFEROUS IRON ORE.** By G. H. Stanley. P. C. M. & M. Soc. S. A., vol. 10, p. 162, 19½ columns, I.; p. 345, 11½ columns, I.; p. 253, 2 columns.
- THE RELATION OF SLOW DRIVING TO FUEL-ECONOMY IN IRON BLAST FURNACE PRACTICE.** By J. B. Miles. T. A. I. M. E., vol. 39, p. 540. 4½ pages.
- THE WORK OF THE TESTING DEPARTMENT OF THE WATERTOWN ARSENAL, IN ITS RELATION TO THE METALLURGY OF STEEL.** By J. E. Howard. T. A. I. M. E., vol. 39, p. 223. 5½ pages.
- THE WORK OF THE TESTING DEPARTMENT OF THE WATERTOWN ARSENAL IN ITS RELATION TO THE METALLURGY OF STEEL.** Discussion of the Paper of J. E. Howard, p. 223. T. A. I. M. E., vol. 39, p. 859. 32½ pages. I.
- THE UNIFORM NOMENCLATURE OF IRON AND STEEL:** Discussion of the Report of Committee 24 of the International Association for Testing Material, presented at the Brussels Congress, 1906, and republished in Bi-monthly Bulletin, No 20, March, 1908, pp. 227-237, but not included in this volume. T. A. I. M. E., vol. 39, p. 924. 6 pages.
- THE AIR-FURNACE PROCESS OF PREPARING WHITE CAST IRON FOR THE MALLEABILIZING PROCESS.** By H. M. Howe and Enrique Gouceda. T. A. I. M. E. vol. 39, p. 765. 9½ pages. D.
- OXYGEN PROCESS FOR MELTING OF IRON** By A. Gradenwitz M. & M., vol. 31, p. 146. 4 columns I.
- A NEW MARTIN FURNACE WITH DOUBLE HEARTH.** E. & M. J., vol. 88, p. 728. 3½ columns. I.
- ORE HANDLING BRIDGE AT DUQUESNE STEEL WORKS** E. & M. J., vol. 87, p. 944. 2 columns. I.
- THE ROLLING OF SPECIAL SECTIONS OF IRON AND STEEL.** By W. McKee. J. W. Soc. E., vol. 14, p. 729. 15 pages. I.
- CALCINATION ("RUCKING") OF IRON-STONE IN NORTH STRAFFORDSHIRE, ENGLAND.** T. I. M. E., vol. 27, p. 107. 5 pages. I.
- ROASTING AND SMELTING PLANT AT LONDONDERRY IRON WORKS.** By R. G. Leckie. J. M. Soc. N S., vol. 1, p. 50, pt. 3. 2½ pages.
- NATIVE IRON SMELTING IN HAUTE GUINÉE (WEST AFRICA).** By J. M. Campbell. T. I. M. & M., vol. 19, p. 458. 5 pages. I.
- IRON AND STEEL WORKS AT HANYANG, HUPE, CHINA.** By A. J. Seltzer. E. & M. J., vol. 89, p. 1231. 10 columns. I.
- THE UNITED STATES STEEL CORPORATION.** By F. Hobart. E. & M. J., vol. 87, p. 659. 7½ columns.
- INTRODUCTION OF THE THOMAS BASIC STEEL PROCESS IN THE UNITED STATES.** By G. W. Maynard. T. A. I. M. E., vol. 41, p. 280, 16 pages; p. 903, 1 page.
- THE COLOLSEUS PROCESS FOR MAKING SLAG CEMENT.** By F. A. Talbot. E. & M. J., vol. 90, p. 608 4½ columns. I.
- ON THE PROGRESS AND PRESENT CONDITION OF THE MANUFACTURE OF IRON IN THE UNITED STATES.** By E. F. Pletschke. Min. Mag., vol. 10, p. 223. 6 pages.
- ON THE MANUFACTURE OF STEEL** Min. Mag., vol. 5, p. 296 10½ pages.
- THE IRON MANUFACTURE OF GREAT BRITAIN.** By W. Truran. Min. Mag., vol. 5, p. 459, 21½ pages, I., vol. 6, p. 1, 14 pages; p. 225, 11½ pages, I.; p. 304, 11½ pages, p. 398, 11½ pages.
- MANUFACTURE OF WROUGHT STEEL** Min. Mag., vol. 10, p. 216. 5 pages

RECENT DEVELOPMENTS IN THE METALLURGY OF IRON. By B. Neumann. E. & M. J., vol. 89, p. 1068. 9 columns.

THE PRESENT TECHNICAL CONDITION OF THE STEEL INDUSTRY OF THE UNITED STATES. By P. Barnes. U S G S., Bull. 25 85 pages 1885.

IRON STEEL AT CLOSE OF NINETEENTH CENTURY. By J M Swank U S. G. S., Mineral Resources, 1900

TWENTY YEARS' PROGRESS IN IRON AND STEEL MANUFACTURE IN UNITED STATES. By J. M. Swank. U S G S., Mineral Resources, 1891 37 pages.

MANUFACTURE OF IRON AND STEEL; AND IRON ORES OF THE UNITED STATES. By J M Swank U.S. G S., Mineral Resources 1883-1884, vol 14.

PIG IRON PRODUCTION FOR 100 YEARS. E & M. J., vol. 90, p. 1263. $\frac{1}{2}$ column.

SOUTHERN RESOURCES FOR MANUFACTURE OF IRON AND STEEL. By J. Birkinbine. U S G. S., Mineral Resources, 1886, vol. 8. 4 pages.

HISTORY OF THE DEVELOPMENT OF THE MANUFACTURE OF IRON AND STEEL SHEETS. By S. M. Kinter. P E. Soc. W. Pa., vol 23, p 147. 35 pages. I.

MANUFACTURE OF IRON BLOOMS. By J. T. Hodge. Min. Mag., vol. 2, p. 244. 5 pages I.

IRON AND STEEL FROM BLACK SANDS. P. C. M. & M Soc S. A., vol. 7, p. 418. $3\frac{1}{2}$ columns.

THE IRON MANUFACTURE OF GREAT BRITAIN: Theoretically and Practically Considered. By W. Truran. Min. Mag., vol. 8, p. 105, 16 pages; p 203, 17 pages; p. 301, 20 pages; p 399, $16\frac{1}{2}$ pages; p. 495, 12 pages; vol 7, p. 38, 20 pages; p. 125, 25 pages; p. 234, 11 pages, p 334, $10\frac{1}{2}$ pages; p 425, 20 pages

BASIC OPEN-HEARTH STEEL MANUFACTURE, AS CARRIED OUT BY THE DOMINION IRON AND STEEL COMPANY AT SIDNEY, CAPE BRETON, NOVA SCOTIA. By F. E. Lathe J. C M I., vol. 10, p 373 24 pages I.

THE IRON AND STEEL INDUSTRY OF THE PROVINCE OF ONTARIO, CANADA. By J G Barnelee J. C M I., vol 11, p. 125 25 pages I

EARLY IRON MAKING IN BRAZIL. By O A. Derby E. & M J., vol 88, p. 1112 2 columns.

IRON MAKING IN AUSTRALIA. By A Selwyn-Brown E & M. J., vol 85, p. 601. $2\frac{1}{2}$ columns

STEEL MAKING IN CHINA. By T T Read Min. Mag., London, vol. 2, p. 199 11 columns I.

STEEL INDUSTRY OF THE TRANSVAAL. By D F Campbell Min Mag., London, vol 2, p 54. 4 columns. I.

TOOL STEEL MAKING IN STYRIA. By R F Bohler Sch Mines Quart., vol 29, p. 329 • $12\frac{1}{2}$ columns I.

See also THE IRON TRADE, and ELECTRO-METALLURGY, also COST OF METALLURGICAL TREATMENT.

Iron Blast Furnace Method, Etc.

THE DESSICATION OF FURNACE AIR. M. & M., vol 31, p. 723. $6\frac{1}{2}$ columns I.

DRY AIR BLAST IN STEEL MAKING. P. C. M. & M. Soc. S. A., vol. 9, p. 217 $\frac{1}{2}$ column

IMPROVEMENTS IN THE DRY AIR BLAST. E & M J., vol. 88, p. 1170. $3\frac{1}{2}$ columns. I.

GAYLEY DRY AIR BLAST AT WARWICK FURNACE. By E. B. Cook. E. & M. J., vol. 86, p 810. 11 columns.

GAYLEY'S INVENTION OF THE DRY BLAST. By R. W. Raymond. E. & M. J., vol. 86, p 1200. $8\frac{1}{2}$ columns

- GAYLEY'S INVENTION OF THE DRY BLAST** By R. W. Raymond T. A. I. M. E., vol 39, p. 695. 10 pages.
- EXPERIENCE WITH THE GAYLEY DRY BLAST AT THE WARWICK FURNACES, POTTSTOWN, PENNSYLVANIA.** By E. B. Cook. T. A. I. M. E., vol 39, p 705 17½ pages. I.
- EXPERIENCE WITH THE GAYLEY DRY BLAST AT THE WARWICK FURNACES, POTTSTOWN, PENNSYLVANIA.** Discussion of the Paper of E. B. Cook, p. 705 T. A. I. M. E., vol. 39, p 922. 2 pages.
- NOTES ON THE GAYLEY DRY-AIR BLAST-PROCESS.** Discussion of C A Meissner's Paper. T. A. I. M. E., vol 38, p 901. 11 pages. D.
- ZINC OXIDE IN IRON-ORES, AND THE EFFECT OF ZINC IN THE IRON BLAST FURNACE** By J J. Porter T. A. I. M. E., vol 38, p 448. 7 pages.
- THE USES OF CHEMICAL ANALYSIS IN IRON BLAST FURNACE PRACTICE AND SOME NOTES ON LABORATORY METHODS.** By G D Drummond J C M. I., vol 10, p. 442 20 pages.
- A HOT-BLAST FURNACE FOR THE SMALL OPERATOR** By P A Babb E & M J, vol 88, p 647. 9½ columns I.
- THE SHAPE OF THE IRON BLAST FURNACE** By H M. Howe E. & M. J., vol. 86, p 507. 13½ columns. I.
- BLAST PRESSURE AT THE TUYERES AND INSIDE THE FURNACE.** By R. H. Sweeter T A I M. E., vol. 40, p. 247. 6 pages. I
- AN UNUSUAL BLAST FURNACE PRODUCT, AND NICKEL IN SOME VIRGINIA IRON ORES.** By F Firmstone. T. A. I. M. E., vol. 39, p. 547. 2 pages; Discussion of the paper of F Firmstone, p 921. 1 page.
- AMERICAN BLAST FURNACE PROGRESS.** E. & M. J., vol. 88, p. 1219. 1½ columns.
- TRIAL RUNS WITH THE GARRETSON FURNACE** By C. C Semple E. & M J, vol 88, p 1266. 6 columns
- THE COMBUSTION-TEMPERATURE OF CARBON AND ITS RELATION TO BLAST FURNACE OPERATION** By C. P. Linville T. A. I. M. E., vol. 41, p 269. 11½ pages. D
- DEVELOPMENT IN THE SIZE AND SHAPE OF BLAST FURNACES IN THE LEHIGH VALLEY, AS SHOWN BY THE FURNACES AT THE GLENDON IRON WORKS** By F. Firmstone T. A. I. M. E., vol. 40, p 459. 16 pages. I.
- BLAST FURNACE PRACTICE: Discussion of T F Witherbee Paper** T. A. I. M. E., vol 38, p. 887. 13 pages
- IRON MANUFACTURE: Economy in Its Production, Improved Form of Blast Furnace** Min Mag., vol 10, p 415. 6 pages. I.
- PREPARATION OF MATERIALS FOR THE BLAST FURNACE** By D Baker E. & M. J., vol. 85, p. 609 5½ columns
- THE DISTRIBUTION OF IRON BLAST FURNACES IN THE UNITED STATES.** E & M. J., vol 90, p. 160. Table and Map.
- See also **THE IRON TRADE.**
- Electro-Metallurgy of Iron and Steel**
- TOOL STEEL DIRECT FROM THE ORE IN AN ELECTRIC FURNACE** By A. Stansfield. J C. M. I., vol 13, p 151. 11½ pages. I.
- POSSIBILITIES IN THE ELECTRIC SMELTING OF IRON ORES.** By A. Stansfield. J. C M I., vol. 11, p. 180. 8 pages
- THE ELECTROTHERMIC PRODUCTION OF STEEL FROM IRON ORE.** By A. Stansfield. J C. M. I., vol. 10, p. 127. 4½ pages.
- PROGRESS IN ELECTRO-SIDERURGY.** By P McN Bennie. J. C. M I., vol. 13, p. 135. 16 pages. I.

THE TREATMENT OF STEEL IN ELECTRIC FURNACES By H. M. Howe. E. & M. J., vol. 88, p. 400. 21 columns. I.

ELECTRICAL REDUCTION OF IRON. By J. W. Richards. Min. & Sci. Press, vol. 100, p. 549. 8 columns. I.

ELECTRIC SMELTING OF IRON ORE IN SWEDEN E. & M. J., vol. 88, p. 474. 1½ columns.

THE REDUCTION OF IRON ORES IN THE ELECTRIC FURNACE. By R. Turnbull J. C. M. I., vol. 11, p. 173 6 pages.

ELECTRIC SMELTING OF IRON ORE. By C. E. Elwell. Min. & Sci. Press, vol. 97, p. 846. 1 column.

THE ELECTRICAL SMELTING OF IRON ORES By R. L. Phelps. Min. & Sci. Press, vol. 95, p. 87 4½ columns. I.

THE GIROD ELECTRIC FURNACE AND THE FRENCH WORKS USING THE PAUL GIROD STEEL PROCESS. By W. Borchers. T. A. I. M. E., vol. 41, p. 120. 18½ pages. I.

Metallurgy of Lead

REMARKS ON THE PROCESS FOR SMELTING LEAD. By A. Trippel. Min. Mag., vol. 4, p. 36. 12 pages.

EARLY SMELTING AT CERRO GORDO. By F. Drake. Min. & Sci. Press, vol. 100, p. 745. 2½ columns.

A PROPOSED NEW METHOD OF SMELTING LEAD CONCENTRATES. By H. F. Collins. T. A. I. M. E., vol. 4, p. 124. 7½ pages.

HANDLING BLAST FURNACE BULLION AT THE SELBY SMELTING WORKS. By J. C. Bennett. E. & M. J., vol. 86, p. 83. 5 columns. I.

DESILVERIZING LEAD. By H. O. Hofman. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14

LEAD SLAGS. By M. W. Iles. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.

LEAD AND COPPER SLAGS By J. A. Bair. Min. & Sci. Press, vol. 101, p. 602. 6½ columns.

THE ROBBINSON NON-SLAGGING TUYERE E. & M. J., vol. 85, p. 251. 1 column. I

ALTERING THE CAPACITY OF A BLAST FURNACE By T. Kapp E. & M. J., vol. 90, p. 595. ½ column.

SYSTEM OF MIXING ORE PREPARATORY TO SMELTING E. & M. J., vol. 89, p. 648, ½ column. I.

LOSS BY LEAKAGE OF BLAST IN LEAD AND COPPER FURNACES E. & M. J., vol. 86, p. 756. 1 column. I.

THE MANUFACTURE OF SUBLIMED WHITE LEAD By J. I. Blair. E. & M. J., vol. 90, p. 906. 7 columns. I.

THE ELECTROLYTIC TREATMENT OF GALENA. By E. F. Kern and H. S. Auerbach. Sch. Mines. Quart., vol. 29, p. 63. 19½ pages.

METALLIC LEAD FROM GALENA BY AN ELECTROLYTIC PROCESS. E. & M. J., vol. 89, p. 715. 1 column. I

ELECTROLYTIC REFINING OF LEAD-ANTIMONY ALLOY. E. & M. J., vol. 87, p. 892 ½ column.

See also ELECTRO-METALLURGY.

THE BAG HOUSE AT SELBY, CALIFORNIA By J. C. Bennett. E. & M. J., vol. 86, p. 451 16½ columns. I.

THE BAG HOUSE AND ITS RECENT APPLICATIONS. By W. C. Ebaugh. E. & M. J., vol. 88, p. 1020. 6 columns. I.

THE REFINING OF BASE BULLION AT PORT PIRIE AND TREATMENT OF BY-PRODUCTS. By B. B. Bayly. T. A. I. M. E., vol. 12, p. 79. 26 pages. I.

NOTE ON THE REFINING OF BASE BULLION. By W. Bowling. P. C. M. & M. Soc. S. A., vol. 5, p. 225, 6 columns; p. 263, 3½ columns; p. 313, 1½ columns; p. 341, 4 columns; vol. 6, p. 19, ½ column; p. 49, 4 columns; p. 169, 3 columns.

A FEW NOTES ON THE REFINING OF BASE BULLION. By C W Lee and W. O Brunton P. C M. & M. Soc. S A, vol. 7, p. 358, 5 columns, I.; vol. 8, p. 52, 1 column; p. 80, $\frac{1}{2}$ column; p. 121, $\frac{1}{2}$ column.

THE REFINING OF BASE LEAD BULLION CONTAINING SILVER, AND HIGH IN GOLD By G. H Blakemore T. Au. I M E., vol. 5, p. 221. 38 pages

A FEW NOTES ON THE CUPPELLING GOLD-LEAD BULLION. By Geo. Melvill P C. M & M Soc S A., vol 9, p 157, $3\frac{1}{2}$ columns; p. 345, $\frac{1}{2}$ column

REMOVING ACCRETIONS IN CRUCIBLE OF LEAD FURNACES. By J. N. Goddard. E & M J, vol. 86, p. 763. 3 columns. I.

LEAD SMELTING IN QUEENSLAND, AUSTRALIA E & M. J, vol 87, p. 604. 2 columns.

TRAIL SMELTER AND LEAD REFINERY. By J. M. Turnbull M & M, vol. 31, p. 121. 10 columns I

METALLURGICAL TREATMENT OF JAMESONITE ORES, BLACK HILLS, SOUTH DAKOTA By G P Ives and I. D. Ossa. E & M J, vol 87, p. 891. 3 columns

SMELTING REFRACTORY LEAD ORES AT LAURIUM. By L. Guillaume. E & M. J., vol. 88, p. 446 $7\frac{1}{2}$ columns. I.

LEAD AND ZINC SMELTING IN UPPER SILESIA By O. H. Hahn E. & M. J., vol. 89, p. 1111. $9\frac{1}{2}$ columns. I.

SMELTING THE LEAD ORE OF THE COEUR D'ALENE REGION Min. & Sci. Press, vol 96, p. 627 14 columns. I.

SMELTING BISMUTH-LEAD ORE, SINOLOA, MEXICO By S. E. Bretherton E. & M J., vol. 89, p. 773. $4\frac{1}{2}$ columns. I.

WEBB CITY LEAD SMELTERY. By L. L. Wittich. M & M., vol. 31, p. 709. $3\frac{1}{2}$ columns. I.

A PERUVIAN LEAD SMELTER. By L W Strauss. Min. & Sci. Press, vol. 97, p 361. $4\frac{1}{2}$ columns. I.

MIDVALE BLAST FURNACE PRACTICE, UTAH. By L. A Palmer. M. & M., vol. 30, p. 543 4 columns I.

See also **METALLURGY OF GOLD AND SILVER, and METALLURGY OF COPPER, also COST OF METALLURGICAL TREATMENT.**

Metallurgy of Nickel and Cobalt

MINING AND SMELTING PLANT OF MOND NICKEL COMPANY. By G B. Shipley. E. & M J., vol 90, p. 364. $8\frac{1}{2}$ columns I

ELECTRODE POSITION OF NICKEL, By E F. Kern and F G. Fabian. Sch. Mines Quart., vol. 29, p. 342. 28 pages.

Metallurgy of Quicksilver

REDUCTION OF QUICKSILVER. Min. & Sci. Press, vol. 95, p. 151. $\frac{1}{2}$ column.

SHORTENING THE ROASTING PERIOD FOR MERCURY ORES. By W. B. Dennis. E & M. J, vol. 88, p 112. $14\frac{1}{2}$ columns. I.

QUICKSILVER REDUCTION AT NEW ALMADEN. By S. B. Cristy. U. S. G. S., Mineral Resources, 1883 and 1884, vol. 14.

SMELTING OF QUICKSILVER ORES OF HUANCABELICA, PERU. Min. & Sci. Press, vol. 99, p. 563. 6 columns.

GUADALOPE QUICKSILVER WORKS. By C. De Kalb. Min & Sci. Press, vol 100, p. 446. 4 columns. I.

See also **COST OF METALLURGICAL TREATMENT.**

Metallurgy of Rare Metals

METALLURGY OF ANTIMONY. M & M., vol. 29, p. 477. $1\frac{1}{2}$ columns.

NOTES ON THE CONSTRUCTION OF AN ARSENIC PLANT. By H Howes. E. & M. J., vol. 88, p. 561. $\frac{1}{2}$ column

MANUFACTURE OF METALLIC TUNGSTEN AND FERRO-TUNGSTEN. By L. R. Pratt. E. & M. J., vol 90, p. 959. 1½ columns.

URANIUM AND VANADIUM METALLURGY By J. H. Haynes. M & M., vol. 30, p. 139. 3½ columns. Flow-Sheet.

Roasting Ores, Roasting Furnaces, Etc.

RECENT PROGRESS IN BLAST-ROASTING. By H. O. Hofman. T. A. I. M. E., vol 41, p. 739, 24 pages, I; p. 915, 4½ pages, I.

RECENT PROGRESS IN BLAST ROASTING OF SULPHIDES. By H. O. Hofman. E. & M. J., vol. 90, p. 317. 9½ columns. I.

DETERMINING DUST LOSSES FROM ROASTERS. By C. C. Hoke. E. & M. J., vol. 89, p. 857. 1½ columns. I.

LABORATORY EXPERIMENTS IN LIMB-ROASTING A GALENA CONCENTRATE WITH REFERENCE TO THE SAVELSBERG PROCESS. By H. O. Hofman, R. P. Reynolds, and A. E. Wells. T. A. I. M. E., vol. 38, p. 126. 16 pages. I.

LABORATORY EXPERIMENTS IN LIMB-ROASTING A GALENA CONCENTRATE: A Discussion of H. O. Hofman's Paper. T. A. I. M. E., vol. 38, p. 935. 5 pages.

NOTES ON THE DESULPHURIZATION OF SLIMES BY HEAP ROASTING AS CONDUCTED BY THE BROKEN HILL PROPRIETARY COMPANY, LIMITED. By E. J. Horwood. T. A. I. M. E., vol 9, p. 106. 10 pages.

THE McDUGALL ROASTING FURNACE By L. S. Austin. Min. & Sci Press, vol. 95, p. 280. 4½ columns. I.

A MAKESHIFT ROASTING FURNACE. By H. W. Ross. Min. & Sci. Press, vol. 96, p. 527. 1½ columns.

THE WILFLEY FURNACE. By J. M. McCleave. E. & M. J., vol. 85, p. 453. 3½ columns. I.

COMBINED ROASTING AND SMELTING FURNACE. Min & Sci. Press, vol. 22, p 257. 3 columns. I

THE BAILEY ROASTING FURNACE. Min & Sci. Press, vol. 22, p. 297. 3 columns. I.

THE DWIGHT AND LLOYD SINTERING PROCESS. By A. S. Dwight. E & M J., vol. 85, p. 649. 11 columns. I.

THE DESULPHURIZATION OF METALLIFEROUS SULPHATES, OR DR. HOLLAND'S PROCESS. By O. M. Lieber. Min. Mag, vol 3, p. 168. 6½ pages.

ROASTING OF THE ARGENTIFEROUS COBALT-NICKEL ARSENIDES OF TEMISKAMING, ONTARIO, CANADA. By H. M. Howe, Wm. Campbell, and C. W. Knight. T. A. I. M. E., vol. 36, p. 162. 9 pages. I

ROASTING AT KALGOORLIE. Min. & Sci Press, vol. 101, p. 50. 4 columns. I.

ROASTING THE JAMESONITE ORES, BLACK HILLS, SOUTH DAKOTA. E. & M. J., vol. 87, p. 891. ¾ column

THE ROASTING OF TELLURIDE ORES. By R. L. Mack and G. H. Scibbid. Min. & Sci. Press, vol. 95, p 751 6½ columns; p. 777, 9 columns. I.

SINTERING AT CERRO DE PASCO. Min. & Sci Press, vol. 98, p 195. 1½ columns. I.

See also **METALLURGY OF GOLD AND SILVER, METALLURGY OF LEAD, METALLURGY OF COPPER, ETC.**

See also **COST OF METALLURGICAL TREATMENT.**

Smoke Problem: Flue Dust, Fume, Bag Houses, Chimneys, Etc.

DISPOSAL OF GASES AT SELBY, CALIFORNIA. By J. C. Bennett. E. & M J., vol. 86, p. 604. 2½ columns. I.

DUST EXTRACTION FROM SMELTER SMOKE. Min. & Sci. Press, vol. 101, p. 108 2 columns. I.

- SPRAGUE PROCESS FOR TREATING FURNACE GASES.** By C. B. Sprague E. & M. J., vol. 89, p. 519. 5 columns.
- CHICAGO'S SMOKE PROBLEM.** By P. P. Bird. J. W. Soc. E., vol. 15, p. 279. 68 pages. I.
- SMOKE PREVENTION.** By J. W. Krause. P. E. Soc. W. Pa., vol. 24, p. 91. 30 pages
- SEARCH FOR THE CAUSE OF INJURY TO VEGETATION IN AN URBAN VILLA NEAR A LARGE INDUSTRIAL ESTABLISHMENT.** By P. Frazer. T. A. I. M. E., vol. 38, p. 498. 22 pages. I.
- BIBLIOGRAPHY OF INJURIES TO VEGETATION BY FURNACE GASES.** By P. Frazer. T. A. I. M. E., vol. 38, p. 520. 36 pages.
- SMOKE IN SMELTING WORKS.** By E. H. Messiter. Min. & Sci. Press, vol. 97, p. 26. 3½ columns.
- SMELTER SMOKE WITH A DISCUSSION OF METHODS OF LESSENING ITS INJURIOUS EFFECTS** By L. S. Austin. Min. & Sci. Press, vol. 95, p. 649. 6 columns I.
- NOTES ON SMOKE SUITS.** Min. & Sci. Press, vol. 95, p. 90. 2½ columns
- THE CONDENSATION OF FUME AND THE NEUTRALIZATION OF FURNACE GASES.** By F. T. Havard. T. A. I. M. E., vol. 41, p. 631. 17 pages.
- ELIMINATION OF SMELTER FUME.** By L. A. Palmer. M. & M., vol. 30, p. 496. 7 columns. I.
- SMELTER FUME IN SHASTA COUNTY, CALIFORNIA.** By S. S. Smith. Min. & Sci. Press, vol. 101, p. 375. 3½ columns. I.
- LEGAL STATUS OF WORKS PRODUCING NOXIOUS GASES.** By C. Baskerville. E. & M. J., vol. 87, p. 884. 10½ columns.
- A PROCESS FOR SAVING WASTE IN SMELTERY GASES.** By G. C. Westly. E. & M. J., vol. 90, p. 1164. 12 columns.
- COTTRELL PROCESS FOR CONDENSING SMELTER FUMES.** E. & M. J., vol. 86, p. 375. 9 columns. I.
- SMELTER VERSUS OIL FUME.** By E. B. Braden. Min. & Sci. Press, vol. 99, p. 192. 4½ columns
- FLUE DUST AND FUME IN SMELTERY GASES.** By L. T. Wright. E. & M. J., vol. 90, p. 111. 4½ columns.
- SETTLING FINE DUST AT COPPER QUEEN SMELTERY.** By G. B. Lee E. & M. J., vol. 90, p. 504. 8 columns. D.
- FLUE CONSTRUCTION AND THE SAVING OF FLUE DUST.** By J. B. Wynne. E. & M. J., vol. 88, p. 602. 7 columns. I.
- RECOVERY OF FLUE DUST.** By C. W. Goodale. E. & M. J., vol. 89, p. 368. 1½ columns.
- A CONCRETE BLOCK CHIMNEY.** Min. & Sci. Press, vol. 97, p. 468. 1 column I.
- NEW 506-FOOT CHIMNEY AT GREAT FALLS SMELTER.** By E. Higgins. E. & M. J., vol. 87, p. 156. 10 columns. I.
- THE CATENARY FLUE.** By N. S. Stewart. E. & M. J., vol. 88, p. 257. 1½ columns.
- THE WORLD'S LARGEST CHIMNEY.** By R. L. Hertick. M. & M., vol. 30, p. 257. 7 columns I.
- THE ANTI-SMELTER FIGHT IN CALIFORNIA.** E. & M. J., vol. 86, p. 603. 1 column.
- DEVICE FOR SHAKING BAGS IN SMELTER BAG HOUSE.** E. & M. J., vol. 86, p. 1009. 2 columns.
- THE DEPOSITION OF FLUE DUST.** By C. F. Shelby. E. & M. J., vol. 85, p. 204. 3 columns.

Metallurgy of Tin

- THE ASSAY OF TIN ORES.** By J. Gray. P. C. M. & M. Soc. S. A., vol. 10, p. 312, 6½ columns; p. 402, 2½ columns.

SMELTING THE TIN ORES IN THE YUNNAN DISTRICT, CHINA. T. I. M. & M., vol. 19, p. 192. 2 pages I.

THE METALLURGICAL TREATMENT OF COMPLEX TIN SULPHIDES By P. J. Thibault. T. Au. I. M. E., vol. 8, pt 2, p. 155. 8½ pages.

Metallurgy of Zinc

RECENT ADVANCES IN THE ELECTRO-METALLURGY OF ZINC. By F. Peters. E. & M. J., vol. 89, p. 1017 7½ columns. I.

ELECTRIC ZINC SMELTING By F. T. Snyder Min. & Sci. Press, vol. 95, p. 720 1½ columns.

ELECTRIC FURNACE FOR ZINC SMELTING. By F. A. J. FitzGerald M & M., vol. 31, p. 703. 2½ columns I.

TREATMENT OF COMPLEX ZINC SULPHIDE ORES AT OKER, GERMANY By H. Pope. E. & M. J. vol. 89, p. 819 6½ columns.

PHYSICAL FACTORS IN THE METALLURGICAL REDUCTION OF ZINC OXIDE By W. McA Johnson. T. A. I. M. E., vol. 38, p. 656 7½ pages.

PRESENT ZINC SMELTING CONDITIONS By R. G. Hall. Min. & Sci. Press, vol. 101, p. 299. 2½ columns.

A METHOD FOR THE RECOVERY OF ZINC FROM SOLUTIONS OF SULPHATE. By W. Cullen. P. C. M. & M. Soc. S. A., vol. 10, p. 87, 6 columns; p. 209, 2 columns; p. 240, 2 columns.

ZINC SMELTING FOR PIGMENTS. By E. W. Buskett. Min. & Sci. Press, vol. 97, p. 604. 3 columns. I.

FUME FILTRATION FOR PRODUCTION OF PURE SPelter By J. S. G. Primrose. E. & M. J., vol. 90, p. 415. 11 columns. I.

SMELTING BRIQUETTED ZINC ORE. By T. J. Hoover. E. & M. J., vol. 90, p. 323. 6 columns.

CHARGING AND CLEANING MACHINE FOR ZINC FURNACES By O. Saeger

E. & M. J., vol. 89, p. 780. 4½ columns. I.

See also COST OF METALLURGICAL TREATMENT.

Miscellaneous Information

THE RELATIONS BETWEEN MINERS AND SMELTERS. E. & M. J., vol. 85, p. 222. 4½ columns

CALCULATION OF HEAT CONDUCTIVITIES. By C. Hering. Min. & Sci. Press, vol. 98, p. 357. 1½ columns.

ELECTRIC HEAT VS HEAT FROM FUEL. Min. & Sci. Press, vol. 95, p. 246. 2 columns

WASTE OF HEAT AND MATERIALS IN SMELTING WORKS. By H. Lang E. & M. J., vol. 88, p. 916 8½ columns

FUSION TABLE OF MINERALS IN THE OXYGEN-GAS BLOWPIPE FLAME. By L. M. Luquer Sch. Mines Quart., vol. 29, p. 179. 4 pages.

PRACTICAL PYROMETRY. By R. S. Whipple. J. W. Soc. E., vol. 12, p. 169 34 pages I.

ADJUSTABLE PYROMETER STAND. By L. W. Bahney. Min. & Sci. Press, vol. 98, p. 629. 2½ columns. I.

AN ADJUSTABLE PYROMETER STAND. By L. W. Bahney T. A. I. M. E., vol. 40, p. 760. 4 pages. I

MEASURING INDUSTRIAL TEMPERATURES. By T. T. Read. Min. & Sci. Press, vol. 95, p. 712 6½ columns I

SHAPE BRICK AND METHODS OF CALCULATING REQUIREMENTS FOR FURNACE WORK. By N. Peters. E. & M. J., vol. 87, p. 447 8½ columns. I.

USE OF BASIC REFRACTORY BRICK IN METALLURGY By F. T. Havard E. & M. J., vol. 86, p. 802 6½ columns

THE HAVARD COAL METER: An Apparatus for Measuring Coal on Way to Furnace M. & M., vol. 30, p. 728. 1 column. I

- BLAST FURNACE TUYERS.** By L S Austin. Min & Sci. Press, vol. 98, p 392. $\frac{2}{3}$ column. I.
- THE UTILIZATION OF WASTE HEAT CONTAINED IN SLAGS FROM SMELTING FURNACES.** By J. Howell and E A Ashcroft T Au I. M. E., vol. 1, p 66 $4\frac{1}{2}$ pages I
- FURNACE CHARGING** By G. F Beardsley Min. & Sci. Press, vol. 95, p 593 $2\frac{1}{2}$ columns.
- AGGLOMERATING ORE-FINES AND FLUE DUST.** By H. Haas. E. & M. J., vol. 90, p 814. $11\frac{1}{2}$ columns. I.
- OLD AND NEW METHODS OF GALVANIZING.** By A. Sang. P E. Soc. W Pa., vol. 23, p. 546. 25 pages.
- ELECTROCEMENTIZING:** Deposition of Metal by Cementation on Other Metal By A. Sang M. & M., vol. 30, p 408. $3\frac{1}{2}$ columns I.
- THE ROOT POSITIVE BLAST BLOWER.** By L S. Austin. Min & Sci. Press, vol. 99, p. 432. 2 columns.
- RELATION BETWEEN THE ASSAY-VALUE OF MILL PRODUCTS AND SMELTER CONTRACTS** By G Caetani. Min & Sci Press, vol 96, p. 25. $3\frac{1}{2}$ columns
- NOISELESS FURNACE FOR BURNING CRUDE OIL AND A CRUDE OIL BURNER.** E. & M J, vol 87, p 889. $\frac{1}{2}$ column. I.
- INVESTIGATION OF FERRO-BORON.** By K Iwai and J C. Ballagh. Min. & Sci. Press, vol. 99, p. 185. $11\frac{1}{2}$ columns. I.
- EFFICIENCY OF HEAT DRYERS.** By W. B. Ruggles. Min. & Sci. Press, vol. 100, p. 456. 1 column.
- SAND BOILS.** By J. J. F. Brand. E. & M J., vol 87, p. 457 3 columns.
- HOUSING CONDITIONS AT THE GARFIELD SMELTER** By L S Austin. Min & Sci. Press, vol. 100, p. 577. $3\frac{1}{2}$ columns. I.
- THERMIT WELDING.** By D. Waterman Min. & Sci. Press, vol. 98, p 724. $2\frac{1}{2}$ columns. I.
- AN IMPROVEMENT IN TIPPING POTS DURING SMELTING.** By W. D. Lloyd. P C. M. & M Soc S. A vol. 8, p. 166 2 columns. I
- THE TREATMENT OF BLACK SANDS** By F. Alexander. P C M & M Soc S A, vol 10, p 174 $4\frac{1}{2}$ columns. I.
- ECONOMY IN CUPOLA SMELTING** By J W. Henderson. P. E. Soc. W. Pa., vol 25, p 313. 20 pages. I.
- CUPOLA SMELTING IN ARIZONA.** By J Douglas, Jr. U S G. S., Mineral Resources, 1883 and 1884, vol. 14.
- THE BESSEMERIZING OF HARDHEAD.** By D. M. Levy and D Ewen T. I. M. & M., vol. 18, p 466. 16 pages. I.
- THE TREATMENT OF SULPHIDE ORES IN VICTORIA.** By S. Radcliff and J. Drevermann. T Au. I. M. E, vol. 13, p. 132. 5 pages.
- TREATMENT OF COMPLEX SULPHIDES.** By D. Clark. Min. Mag., London, vol 2, p. 56. 4 columns. I.
- METALLURGICAL SLEUTHING.** By E. B. Wilson. M. & M., vol. 31, p. 476. 3 columns.

METALS

Iron: Its Alloys, Etc.

THE MANUFACTURE OF ALLOYS OR COMBINATIONS OF METALS Min. Mag., vol. 8, p. 231. 7 pages.

See also **METALLURGY OF IRON AND STEEL, ETC**

See first volume of INDEX

Aluminum and Its Properties

USES OF ALUMINUM. By J. T W. Echwarri. Min. & Sci. Press, vol. 98, p 424. $5\frac{1}{2}$ columns.

ALUMINIUM Uses, Sources, Etc. By E. B. Wilson. M. & M., vol 29, p. 371. $2\frac{1}{2}$ columns.

See also first volume of INDEX

Copper, Mass-Copper, Etc.

THE USES OF COPPER. Min. & Sci. Press, vol. 95, p. 215 1 column.

MICROSTRUCTURE OF COPPER EXAMINED WITH A NEW ETCHING REAGENT. By R. R. Abbott. E. & M. J., vol. 87, p. 1040. 3 columns. I.

See also OCCURRENCE OF COPPER AND COPPER ORES, and first volume of INDEX.

Gold and Silver: Properties, Finess, Etc.

PROOF GOLD AND SILVER By J W. Pack Min. & Sci. Press, vol. 96, p. 324. 1½ columns.

"FIRE" GOLD. Min. & Sci. Press, vol. 96, p. 68. Note

THE ALLOYS OF GOLD AND TELLURIUM By T. K. Rose. T. I. M. & M., vol. 17, p. 285. 8 pages.

"GREEN" GOLD. By F. A. Leach. Min. & Sci. Press, vol. 95, p. 363. 1 column.

GREEN GOLD. By F. A. Leach Min. & Sci. Press, vol. 96, p. 195 ½ column.

NATURE OF GOLD IN ALLUVIALS By F. L. Garrison. Min. & Sci. Press, vol. 98, p. 760 4 columns.

COLLECTING PRECIOUS METAL DUST. E. & M. J., vol. 87, p. 863. 1½ columns I.

CRYSTALLINE CHARACTER OF THE RAND GOLD T. I. M. & M., vol. 17, p. 15. 1 page.

PRECIOUS METALS USED IN THE ARTS. E. & M. J., vol. 87, p. 499. 1 column.

See also THE DEVELOPMENT AND PRODUCTION OF PRECIOUS METAL MINING, and THE OCCURRENCE OF GOLD.

QUANTITATIVE DETERMINATION OF SILVER BY MEANS OF THE MICROSCOPE By J. S. Curtis U S G. S., 6th Ann Rept., pp 323-352. 1884-85. I.

ALLOYS OF GOLD AND TELLURIUM E. & M. J., vol. 86, p. 567. 1½ columns.

See also METALLURGY OF GOLD AND SILVER

Platinum

See also OCCURRENCE OF PLATINUM and first volume of INDEX.

Quicksilver: Its Properties, Etc.

THE USE AND CARE OF MERCURY. Min. & Sci. Press, vol. 95, p. 216 3½ columns

See also OCCURRENCE OF QUICKSILVER, and first volume of INDEX.

Tin: Its Properties, Etc.

See also OCCURRENCE OF TIN, and first volume of INDEX

Properties of Various Metals.

USES OF ANTIMONY. Min. & Sci. Press, vol. 95, p. 336 ½ column.

See also OCCURRENCE OF ANTIMONY.

THE TECHNICAL APPLICATION OF TITANIUM. E. & M. J., vol. 88, p. 771. 3½ columns.

THE ALLOYS OF GOLD AND TELLURIUM. By T. K. Rose. T. I. M. & M., vol. 17, p. 285. 8 pages

See also first volume of INDEX.

MINERALS**Mineral Determination and Classification**

WHAT IS A MINERAL? By J W. Gregory. T. I. M. E., vol. 37, p. 13. 31 pages.

SUGGESTIONS AS TO CLASSIFICATION AND DESCRIPTION OF AUSTRALIAN

USEFUL MINERAL DEPOSITS. By A. Montgomery. T. Au. I. M. E., vol. 3, p. 7 13 pages.

GUIDE TO THE "SIGHT RECOGNITION" OF SEVENTY IMPORTANT MINERALS. By A. J. Moses. Sch. Mines Quart., vol. 31, p. 355. 26 pages.

- A LIST OF NEW CRYSTAL FORMS OF MINERALS** By H. P. Whitlock. Sch. Mines Quart, vol 31, p. 320. 25 pages.
- SIMPLE MINERAL TESTS AND HOW TO MAKE THEM** P. C. M. & M Soc. S A, vol. 10, p 267 4½ columns.
- CRYSTALLOGRAPHIC NOTES.** By H P. Whitlock Sch Mines Quart, vol. 31, p 225 9½ pages D.
- THE GNOMONIC PROJECTION FROM A GRAPHICAL STANDPOINT** By A F. Rogers. Sch. Mines Quart, vol 29, p. 24 9 pages I
- CONTRIBUTIONS TO THE MINERALOGY OF THE PACIFIC COAST** By W. H. Melville and W. Lindgren. U S G S, Bull 61. 40 pages. I. 1890
- CONTRIBUTIONS TO THE MINERALOGY OF THE ROCKY MOUNTAINS** By W Cross U. S G S, Bull 20 114 pages. I. 1885
- THE MICROSTRUCTURE OF A COMPLEX ORE FROM THE FRISCO MINE, IDAHO** By Wm Campbell E & M J, vol 87, p. 260 3½ columns. I
- A NEW METALLOGRAPHIC MICROSCOPE** By W. Campbell. Sch Mines Quart, vol 31, p. 241 5 pages I
- METALLOGRAPHY APPLIED TO ENGINEERING.** By W. Campbell J C M I, vol 11, p 471 14½ pages I
- See also **METALS, and METALLURGY OF VARIOUS METALS.**
- GEOLOGY AND PETROGRAPHY OF CRATER LAKE, NATIONAL PARK.** By J. S. Diller and H B Patton. U. S. G. S, Professional Paper 3 167 pages. I. 1902.
- A MINERALOGICAL LEXICON OF FRANKLIN, HAMPSHIRE, AND HAMPDEN COUNTIES, MASSACHUSETTS** By B. K. Emerson. U. S. G. S., Bull. 126. 180 pages. I. 1895
- THE EDUCATIONAL SERIES OF ROCK SPECIMENS COLLECTED AND DISTRIBUTED BY THE UNITED STATES GEOLOGICAL SURVEY.** By J S Diller U. S G S., Bull. 150 400 pages. I. 1898.
- GRAVIMETRIC DETERMINATION OF BARIUM.** M. & M., vol 29, p. 539. ½ column.
- THE NATURE OF BAUXITE** E & M. J, vol. 85, p 1093. 1½ columns
- TESTS FOR COPPER MINERALS.** By E. W Buskett. M. & M, vol. 31, p. 430. 3 columns.
- PROPERTIES OF GYPSUM.** By F. A. Wilder. M & M, vol 30, p. 275 2 columns.
- THE MICROSTRUCTURE OF NICKELIFEROUS PYRRHOTITES.** By W. Campbell and C W Knight. J. C. M. I, vol. 10, p 274 6 pages. I.
- RESEARCHES UPON CRIPPLE ROCK TELLURIDES** Min & Sci. Press, vol 99, p. 427. 3½ columns.
- CRYSTALLOGRAPHIC STUDY OF THE THINOLITE OF LAKE LAHONTAN.** By E S Dana. U. S G. S., Bull. 12. 34 pages I 1884.
- RADIUM EMANATION** By F. H. Mason. Min. & Sci Press, vol 99, p 425. 3½ columns D
- Value of Ore and Its Determination**
- WHAT IS AN ORE?** By J. F Kemp. Min & Sci. Press, vol 98, p. 419. 8½ columns.
- METHOD OF ESTIMATING WEIGHT OF GOLD IN A QUARTZ SAMPLE** P. C. M. & M. Soc. S. A., vol. 10, p. 27. ½ column.
- SOME ANALYSES OF MOUNT LYELL ORES, ROCKS, ETC** By H. Stewart. T Au I. M. E., vol 8, pt. 2, p. 228. 7 pages.
- ORE OF THE PROMONTORIO SILVER-MINE, DURANGO, MEXICO.** T A I. M. E., vol. 38, p. 740. 2 pages
- See also **COST OF ORES AND METALS.**
- Miscellaneous Mineral Occurrence**
- ARSENIC· Its Uses, Etc** By E. B. Wilson M. & M, vol 29, p. 507. 3½ columns.

ANTIMONY: Its Uses, Ores, Methods of Testing, Etc. By E. B. Wilson. M. & M., vol. 29, p. 476. 3½ columns.

BARIUM Its Uses, Methods of Preparation, Etc. By E. B. Wilson. M. & M., vol. 29, p. 538. 3 columns.

A FULGURITE FROM THE RARITAN SANDS OF NEW JERSEY WITH AN HISTORICAL SKETCH AND BIBLIOGRAPHY OF FULGURITES IN GENERAL. By W. L. Burrows. Sch. Mines Quart., vol. 31, p. 294. 26 pages.

MAGNESITE By C. G. Yale. E. & M. J., vol. 85, p. 110. ¼ column.

PHOSPHORUS. By G. W. Stose. U. S. G. S., Mineral Resources, 1906. 7 pages.

RADIUM IN THE ROCKS OF THE SIMPLON. Min. & Sci. Press, vol. 95, p. 683. ¼ column.

RADIUM AND RADIOACTIVITY By L. F. Miller. M. & M., vol. 31, p. 732. 5½ columns. I.

RADIUM IN ENGLAND. E. & M. J., vol. 87, p. 500. ¼ column.

ON SIBIO-TANTALITE, A NEW MINERAL FROM THE STANNIFEROUS GRAVEL AT GREENBUSHES, BUDSBURY, WEST AUSTRALIA. By J. J. East. T. Au. I. M. E., vol. 1, p. 139. 3 pages.

SILUNDUM: Silicified Carbon. M. & M., vol. 30, p. 403. 1½ columns. I.

UMBER. P. C. M. & M. Soc. S. A., vol. 8, p. 331. 2 columns.

ON THE OCCURRENCE OF DYSCRASITE IN THE A. B. H. CONSOLS MINE, BARRIER RANGE, NEW SOUTH WALES. By G. Smith. T. Au. I. M. E., vol. 1, p. 103. 5 pages. I.

NOTES ON SOME BROKEN HILL AND OTHER BARRIER MINERALS. By C. W. Marsh. T. Au. I. M. E., vol. 4, p. 138. 22 pages. I.

THE USEFUL MINERALS IN TASMANIA. By A. Montgomery. T. Au. I. M. E., vol. 3, p. 203. 28 pages.

THE MINERALS OF CHILE, SOUTH AMERICA. By J. L. Smith. Min. Mag., vol. 5, p. 371. 11½ pages.

MINERALS FROM THE PEGMATITE VEINS OF RINCON, SAN DIEGO COUNTY, CALIFORNIA. By A. F. Rogers. Sch. Mines Quart., vol. 31, p. 208. 10 pages. I.

Measurement and Weight of Ore

See first volume of INDEX

Gold and Silver Ores and Minerals

GOLD CRYSTALS. P. C. M. & M. Soc. S. A., vol. 9, p. 182. 2½ columns. I.

GOLD ORES AND THEIR WORKING. Min. Mag., vol. 7, p. 23, 8 pages; p. 265, 11½ pages; p. 344, 12 pages; p. 445, 7½ pages.

THE TREADWELL ORES U. S. G. S., Bull. 259, p. 77. 1 page.

RESEARCHES UPON THE TELLURIDE GOLD ORES OF CRIPPLE CREEK, COLORADO. By T. B. Crowe. P. C. M. & M. Soc. S. A., vol. 9, p. 398. 6 columns.

ORES OF THE GOLDFIELD DISTRICT. M. & M., vol. 30, p. 510. 2 columns.

RICH ORES OF GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 96, p. 774. 6 columns.

ORES OF GOLDFIELD, NEVADA. Min. & Sci. Press, vol. 97, p. 50. 7½ columns.

CHARACTER OF GOLDFIELD ORES. E. & M. J., vol. 86, p. 1098. 5½ columns.

RICHNESS OF COBALT ORES. By A. R. Ledoux. J. C. M. I., vol. 10, p. 72. 2 pages.

Copper Ores and Minerals

THE CLASSIFICATION OF ORES AT BUTTE. By A. H. Wethey. M. & M., vol. 29, p. 270. 2½ columns. I.

LAKE SUPERIOR COPPER ORE. M. & M., vol. 30, p. 411. 1½ columns.

Iron Ores, Minerals and Meteorites

THE CLINTON IRON ORE OF ALABAMA
T. A. I. M. E., vol 40, p 85. 5
pages I

THE ELECTRICAL AND MAGNETIC PROP-
ERTIES OF THE IRON-CARBURETS.
By C. Barus and V. Strouhal. U S
G S., Bull. 15 33 pages. 1885

PHYSICAL PROPERTIES OF THE IRON-
CARBURETS By C. Barus and
V. Strouhal. U S G. S., Bull. 35.
62 pages. 1886.

THE NEVADA METEORITE By W P
Jenney. Min & Sci. Press, vol 98,
p. 93. 3½ columns I.

Lead and Zinc Ores

See first volume of INDEX

Nickel Ores and Minerals

See first volume of INDEX

**Salt, Quicksilver, Radium, Sulphur,
Asbestos, Amber, Phosphates, Etc.**

A NEW MERCURY MINERAL. E. &
M J, vol 90, p 598 ½ column

See first volume of INDEX

Mica and Its Occurrence

See first volume of INDEX.

Graphite

SOME CHARACTERISTICS OF NATURAL
GRAPHITE. By F. S. Hyde. E. &
M J, vol. 85, p 255 4 columns

See first volume of INDEX.

Corundum, Carborundum, Etc.

See first volume of INDEX.

Asphaltum Compounds

See first volume of INDEX

**Origin, Properties and Occurrence
of Diamonds**

THE CULLIAN DIAMOND E. & M. J.,
vol 87, p 22. 1½ columns.

THE LEMOINE DIAMOND SCHEME. E.
& M. J, vol. 85, p 354. 2½ columns

RESEARCHES IN DIAMOND MAKING.
By F. H. Mason Min. & Sci. Press,
vol 97, p 773. 3½ columns I.

PRECIOUS STONES: Diamonds By
G F. Kunz U. S G. S., Mineral
Resources, 1905.

See first volume of INDEX

Gems and Precious Stones

See first volume of INDEX.

MINE AND MILL CONSTRUCTION**Design of Structures**

DESIGN OF A MINE PLANT. By J W.
Whitehurst and W. P. Cary Min.
& Sci. Press, vol 101, p. 202, 7½ col-
umns, I.; p. 239, 7 columns, I.

PRINCIPLES GOVERNING THE DESIGN
AND EQUIPMENT OF ENGINEERING
BUILDINGS. By W. G. Raymond.
P. Soc. P. E. E., vol 13, p. 146.
9 pages.

DESIGN OF STEEL MILL BUILDING. By
F. E. Davidson. J W Soc E.,
vol. 15, p. 471 21 pages I

WIND BRACING IN BUILDINGS By A.
L Bobbs P. E. Soc. W. Pa.,
vol. 24, p. 279. 24 pages I.

DISPLACEMENT DIAGRAMS OF FRAMED
STRUCTURES BY DEFLECTION ANGLES
By M. S. Falk. Sch. Mines Quart.,
vol. 29, p. 273. 9½ pages I.

SOME COMMERCIAL FEATURES OF
STRUCTURAL ENGINEERING. By E.
Gerber P. E. Soc. W. Pa., vol. 23,
p. 125. 21½ pages.

See also MATERIALS AND METHODS OF
CONSTRUCTION.

Materials and Methods of Construction

STRUCTURAL MATERIALS. Fireproofing Problems; Timber and Steel. P. E. Soc. W. Pa., vol. 26, p. 55. 31 pages. I. D.

See also first volume of INDEX.

Mine Building, Shops, Etc.

MILL CONSTRUCTION IN THE JOPLIN DISTRICT. By O Ruhl. E & M J., vol. 86, p. 125. 10 columns I

UTILIZING ZINC TAILINGS By L. L. Wittich. M & M., vol. 31, p. 601. 5 columns. I.

NEW TYPE OF NATIVE COMPOUND BUILDING OF ALL METALLIC CONSTRUCTION. By C. B. Kingston. P. C. M & M Soc. S. A., vol. 8, p. 291, 4½ columns, I; vol. 9, p. 22, 2 columns; p. 81, 1½ columns.

SURFACE EQUIPMENT AT CLOUAN SHAFT, MINERSVILLE, NEW YORK. By G. C. Stoltz. E & M. J., vol. 90, p. 165. 6 columns I

THE FIRE TAX AND WASTE OF STRUCTURAL MATERIALS IN THE UNITED STATES. By H. M. Wilson and J. L. Cochrane. U. S. G. S., Bull. 418. 30 pages 1910.

FIRE-RESISTIVE PROPERTIES OF VARIOUS BUILDING MATERIALS By R. L. Humphrey. U. S. G. S., Bull. 370. 99 pages. I. 1909.

See also **DESIGN OF STRUCTURES AND MATERIALS AND METHODS OF CONSTRUCTION.**

See also **AMALGAMATION OF GOLD AND SILVER** and **COST OF MINE AND MILL CONSTRUCTION.**

Headframes: Wood and Metal Design

HEADFRAME MADE OF ROUND TIMBERS. E. & M. J., vol. 88, p. 159. I.

HEADFRAMES IN THE ANTRACITE COAL FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, pp. 12, 15, 16 and 17. I.

HEADFRAME USED AT ALLAN SHAFTS, NOVA SCOTIA. J. M. Soc. N. S., vol. 12. p. 22. I.

HEADFRAME AT THE CLOUAN SHAFT, MINERSVILLE, NEW YORK. E & M. J., vol. 90, p. 167. 1 column I

STEEL HEADFRAME, No. 4 SHAFT, MONTREAL MINE. By F. B. Goodman. T. L. S. M. I., vol. 15, p. 209. 2 pages. I.

A PORTABLE SAWHORSE CRANE By C. C. Brayton. Min. & Sci. Press, vol. 101, p. 168. 2½ columns I.

See also **METHODS OF HOISTING; APPLIANCES, ETC**, and **COST OF MINE AND MILL CONSTRUCTION.**

Tipples: Methods of Construction and Materials

TIPPLE CONSTRUCTION FOR THE HOMER COAL MINES. J. C. M. I., vol. 13, p. 244. 2 pages. I.

TIPPLE CONSTRUCTION IN THE BIRMINGHAM DISTRICT. E. & M. J., vol. 89, p. 159. 2 columns. I.

HINTS ON THE DESIGN AND CONSTRUCTION OF WOODEN TRETTLES. By R. Balfour. Min. & Sci. Press, vol. 95, p. 152. 4½ columns. I.

STEEL TIPPLES AND BINS: Precautions Advisable in Design to Insure Their Preservation at Bituminous Coal Mines and Causes of Deterioration. By W. R. Elliott. M & M., vol. 29, p. 1. 4½ columns. I.

See also **Ore AND COAL BINS, ETC**

TIPPLE FOR UTAH FUEL COMPANY M. & M., vol. 30, p. 161. 1 column. I.

MODERN METHODS IN A COAL TIPPLE. By H. Harrison. E & M. J., vol. 90, p. 370. 18½ columns. I.

DETAILS OF TRETTLE CONSTRUCTION AT THE DELAGUA COAL MINE, COLORADO. M & M., vol. 29, p. 318. I.

TIPPLE AT THE KELLERMAN No. 2 MINE, ALABAMA. M. & M., vol. 31, p. 204. 2 columns. I.

See also **DESIGN OF STRUCTURES, PREPARATION OF COAL AND COST OF MINE AND MILL CONSTRUCTION.**

Ore Bins: Materials of Construction and Methods of Calculation

COAL POCKETS M. & M, vol 29, p. 1. 4 columns. I

AN UNDERGROUND ORE POCKET E. & M J, vol 89, p 599. 1 column. I.

CONSTRUCTION OF THE BOSTON CONSOLIDATED BIN AT FOOT OF TRAM. M & M, vol 30, p 267. 1 column. I.

ORE-POCKET CONSTRUCTION AT ELY, NEVADA M. & M, vol 29, p 80. $\frac{1}{2}$ column

CIRCULAR STEEL BINS E & M J, vol 90, p 301. $\frac{1}{2}$ column.

UNDERGROUND ORE-POCKETS IN THE WHITE BEAR MINE. J C M I, vol. 11, p 528 I

AN UNDERGROUND STORAGE POCKET. By S R Elliott M & M, vol 30, p 280 1 column I.

UNDERGROUND ORE BIN IN A LAKE SUPERIOR IRON MINE M. & M, vol. 30, pp. 198, 199 I.

ORE BINS AND GATES IN THE COEUR D' ALENE MILLS E & M J, vol 88, p 1206 $\frac{3}{4}$ columns I

ORE-BIN GATE E & M J, vol 90, p 594. $\frac{1}{2}$ column I.

GATE FOR LUMP ORE BIN By G C. Stoltz E & M J., vol 89, p 809. $1\frac{1}{2}$ columns. I.

STEEL ARC CHUTE GATE E. & M J., vol. 90, p 398 1 column I.

See also CHUTES FOR LOADING CARS AND SKIPS

See also TIPPLES. METHODS OF CONSTRUCTION AND MATERIALS, and METHODS OF HANDLING MINERAL AND COAL, and COST OF MINE AND MILL CONSTRUCTION.

Foundations for Buildings and Mine Construction

SUPPORTING POWER OF VARIOUS FOUNDATION SOILS IN TONS PER SQUARE FOOT. Mill Building Construction, p. 16. Table.

EARTH PRESSURES: Retaining Wall Construction. By C K. Mohler J W Soc E., vol. 15, p. 765 64 pages I

REMOVABLE FOUNDATION BOLTS E. & M. J, vol. 89, p 207. 1 column. I.

FOUNDATIONS FOR RIVER BRIDGE PIERS. By P. F. Brendlinger P E. Soc W. Pa., vol. 2, p 255. 16 pages. I.

FOUNDATION WORK FOR C. & N. W. RAILROAD BRIDGE ACROSS THE MISSISSIPPI RIVER AT CLINTON, IOWA By M Deutsch Sch. Mines Quart., vol 30, p 308. 14 pages. I.

FOUNDATION OF THE GOLDFIELD CONSOLIDATED MILL By P E. Barbour. E & M J., vol. 87, p. 1173. $9\frac{1}{2}$ columns. I.

FOUNDATION FOR THE NORTHWESTERN RAILWAY TERMINAL BUILDING, CHICAGO. By M. Deutsch Sch. Mines Quart., vol 31, p. 219 5 pages. I.

ALTERING STAMP MILL FOUNDATIONS. E & M. J., vol. 89, p 763 1 column. I.

BATTERY FOUNDATION AT THE PITTSBURG SILVER PEAK MILL, NEVADA. M. & M, vol. 29, p 571. I.

See also STAMP MILL PRACTICE.

WATERPROOF CELLAR CONSTRUCTION. By C A. MacClure P. E. Soc W. Pa, vol. 23, p 517. 27 pages. I.

RECENT RETAINING WALL PRACTICE. By C M. Reppert. P. E Soc. W. Pa., vol. 26, p. 316. 51 pages. I.

ERECTION OF A STEEL CHIMNEY. By J. Hebbard. T. Am. I. M E., vol 11, p 71 6 pages. I.

See also USE OF CONCRETE IN MINES and COST OF MINE AND MILL CONSTRUCTIONS.

Flumes: Materials of Construction and Design

FLUME CONSTRUCTION ON THE YUKON. J. C. M. I., vol. 11, p. 556. 2½ pages. I

See also HYDRAULIC MINING

Tanks for Mining Purposes

THE CAPACITY OF CIRCULAR VATS FOR FOOT OF DEPTH. By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 10, p. 407. Table.

THE KLOONNE TYPE OF HIGH-LEVEL STORAGE TANK. By A. Gradenwitz. E. & M. J., vol. 88, p. 820. 5 columns. I.

See also USE OF CONCRETE IN MINES AND COST OF MINE AND MILL CONSTRUCTIONS.

Mine Equipment

AN EMPIRICAL METHOD OF DETERMINING THE MAXIMUM OUTPUT OF A VERTICAL SHAFT, USING A CYLINDRICAL-DRUM WINDER, UNDER GIVEN CONDITIONS. By A. W. Brown. T. I. M. E., vol. 38, p. 622. 23½ pages. I

OUTSIDE ARRANGEMENTS OF A MODERN COAL MINE. By W. R. Roberts. E. & M. J., vol. 89, p. 426. 10½ columns. I.

DESCRIPTION OF MACHINERY AND PLANT AT WELLESLEY NEW PITS, WEMYSS COLLIERIES. T. I. M. E., vol. 36, p. 594. 6 pages. I

EQUIPMENT AND METHODS AT THE HECLA MINE, IDAHO. By R. H.

Allen. E. & M. J., vol. 89, p. 311. 8½ columns. I

SURFACE PLANT AT MODERN COAL MINE. By W. R. Roberts. M. & M., vol. 30, p. 577. 10½ columns. I.

PLANT OF THE UTAH FUEL COMPANY. By A. C. Watts. M. & M., vol. 30, p. 161. 5 columns. I

NOTES ON PLANT IN THE MINING DISTRICTS OF CANADA. By R. E. Commins. T. I. M. & M., vol. 18, p. 180. 20 pages

A MODERN MINE AT AUBONÉ IN FRENCH LORRAINE. By E. Walch. E. & M. J., vol. 89, p. 509. 4 columns. I.

OPERATION OF THE SAYRE COLLIERY, PENNSYLVANIA. By H. J. Heffner. Coal Mining Supplement, E. & M. J., vol. 88, p. 28. 8 columns. I.

COAL MINING AT HOSMER, BRITISH COLUMBIA. E. & M. J., vol. 87, p. 896. 2 columns.

THE YATESBORO POWER PLANT OF THE COWANSEANNOCK COAL AND COKE COMPANY. By C. M. Means. M. & M., vol. 29, p. 11. 5½ columns. I.

TABER PLANT OF THE CANADA WEST COAL COMPANY, AT TABER, ALBERTA. By W. Roberts. M. & M., vol. 29, p. 74. 3½ columns. I.

HOISTING AND COAL-HANDLING PLANT. By W. G. Flint. M. & M., vol. 30, p. 12. 2 columns. I.

See also METHODS OF HOISTING, APPLIANCES, ETC., and METHODS OF HANDLING MINERAL AND COAL.

MINE GASES

Mine Atmosphere and Gases

CHART OF MINE GASES. By C. Myers. E. & M. J., vol. 85, p. 1100. Table.

GASES. Tables and Constants. By G. C. Stone. Sch. Mines Quart., vol. 29, p. 295. 6 pages

MINE GASES AND SAFETY LAMPS. By W. Hortman. E. & M. J., vol. 89, p. 1076. 2 columns.

See also SAFETY LAMPS, TESTING BY SAFETY LAMPS, and DETECTION AND TESTING FOR MINE GASES.

THE REGULATION OF GAS IN MINE AIR CURRENTS. By J. G. Smyth. E. & M. J., vol. 88, p. 14. 9 columns. I.

DETERMINATION AND REGULATION OF THE PERCENTAGE OF GAS IN MINE AIR-COURSES. By J. G. Smyth. M. & M., vol. 29, p. 555. 6 columns. I.

- WITWATERSRAND MINE AIR: Recent Investigations.** By J. Moir. P. C. M. & M. Soc. S. A., vol. 7, p. 65, 12½ columns; p. 145, 1 column; p. 175, 11 columns; p. 203, 8½ columns; p. 248, 32½ columns.
- ON THE GASES AND VENTILATION OF MINES, MORE PARTICULARLY CAVE MINES** Min Mag, vol. 9, p. 316, 6 pages; p. 424, 5 pages
- MINE GASES IN WESTERN AUSTRALIA.** P. C. M. & M. Soc. S. A., vol. 6, p. 227. 1½ columns.
- THE VITIATION OF THE AIR IN TRANSVAAL MINES.** By J. Moir. P. C. M. & M. Soc. S. A., vol. 6, p. 11, 11 columns; p. 53, ½ column; p. 114, 1 column; p. 158, 7 columns, p. 191, 3 columns.
- DEFICIENCY OF OXYGEN IN MINE AIR.** M. & M., vol. 30, p. 174. 1 column
- AFTERDAMP IN MINES** M & M, vol. 30, p. 173 2½ columns
- THE ISOLATION OF CERTAIN MINE AREAS FROM CONTACT WITH THE AFTER-GASES CREATED BY AN EXPLOSION.** By N. Robinson E. & M. J., vol. 87, p. 507. 1½ columns.
- See also **MINE EXPLOSIONS**
- ANALYSES OF SAMPLES OF AIR FROM REPRESENTATIVE MINES IN SCOTLAND.** By T. Gray T. I. M. E., vol. 39, p. 305. 9 pages. I.
- A CAUSE OF MISLEADING AIR-ANALYSIS.** Min & Sci Press, vol. 97, p. 58 1 column.
- NOTE ON THE CAUSE OF CERTAIN MISLEADING ANALYSES OF AIR** P. C. M. & M. Soc. S. A., vol. 8, p. 280. 1 column.
- See also **CHEMISTRY: Methods and Practice.**
- PRODUCTION OF CARBON MONOXIDE IN MINE FIRES.** By E. Schulz Gluckauf, Dec 4, 1909.
- See also **MINE FIRES.**
- PERMISSIBLE QUANTITY OF CARBON MONOXIDE AND CARBON DIOXIDE IN MINES.** P. C. M. & M. Soc. S. A., vol. 7, p. 168, 2½ columns, p. 251, 12 columns
- THE ALLOWABLE AMOUNTS OF CARBON MONOXIDE AND CARBON DIOXIDE IN MINES.** E. & M. J., vol. 90, p. 899. ½ column.
- CARBON DIOXIDE.** By M. L. Fuller. U. S. G. S., Mineral Resources, 1905.
- EXPLOSIVE MINE GASES AND DUSTS.** By R. T. Chamberlin. U. S. G. S., Bull. 383. 67 pages. 1909.
- EXPLOSIVE MINE GASES AND DUSTS.** By R. T. Chamberlin M & M., vol. 30, p. 171. 7½ columns.
- See also **COAL DUST AS AN EXPLOSIVE.**
- EARTHQUAKES AND FIREDAMP** M & M., vol. 30, p. 252. 2½ columns.
- See also **HEALTH OF MINERS.**
- Gases Resulting from Burning Explosives**
- GASEOUS DECOMPOSITION; PRODUCTS OF BLACK POWDER, WITH SPECIAL REFERENCE TO THE USE OF BLACK POWDER IN COAL MINES** By C. M. Young. T. A. I. M. E., vol. 41, p. 454 25½ pages
- GAS FROM HIGH EXPLOSIVES** By W. Cullen M & M, vol. 29, p. 414. 3 columns.
- GASES RESULTING FROM HIGH EXPLOSIVES.** By W. Cullen Min. & Sci Press, vol. 99, p. 297. 3½ columns
- THE GASES RESULTING FROM THE USE OF HIGH EXPLOSIVES.** By W. Cullen. P. C. M. & M. Soc. S. A., vol. 9, p. 144, 17½ columns; p. 235, 4½ columns, p. 274, 1½ columns; p. 306, ½ column
- THE GASES RESULTING FROM THE USE OF HIGH EXPLOSIVES.** By W. Cullen. P. C. M. & M. Soc. S. A., vol. 10, p. 10. 7½ columns.
- ANALYSES OF GASES FROM BURNING NITROGLYCERIN EXPLOSIVES.** By W. Cullen. P. C. M. & M. Soc. S. A., vol. 10, p. 90. 6½ columns.

See also **CHEMISTRY: METHODS AND PRACTICE AND USE OF EXPLOSIVES IN COAL MINING**

Occurrence of Gases in Coal

OCCLUDED GASES IN COAL By S. W. Parr and Percy Barker. Univ. of Ill., Bull. 32, Mar. 1, 1909.

OCCLUDED GASES IN ILLINOIS COALS. T. A. I. M. E., vol. 40, p. 27. 6 pages

CONDITION OF GAS IN COAL. By R. T. Chamberlin. M. & M., vol. 30, p. 20, 8 columns, I.; p. 301, 8 columns. D.

STUDY OF THE CONDITIONS OF GAS IN COAL. By R. T. Chamberlin. Mining World, Feb. 5, 1910.

OXYGEN IN COAL Min. & Sci. Press, vol. 99, p. 399. $\frac{1}{2}$ column

See also **OUTBURSTS OF GAS IN MINES**

Gas in Mines Other Than Coal

POISONOUS GASES IN METAL MINES E. & M. J., vol. 87, p. 300. 1 column.

CARBONIC ACID GAS IN THE EL DOCTOR MINES, MEXICO. Min. & Sci. Press, vol. 95, p. 243. $\frac{1}{2}$ column.

See also **MINE ATMOSPHERE AND GASES** and first volume of **INDEX**.

Outburst of Gas in Mines

ESCAPE OF GAS FROM COAL. By H. C. Porter and F. K. Ovitiz. U. S. Bureau of Mines, Circular No. 2

GAS BLOWERS IN COYOTE MINE: Coal. By A. A. Galloway. M. & M., vol. 31, p. 364. 1 column. I.

See also **OCCURRENCE OF GASES IN COAL**.

Detection and Testing of Mine Gases

THE LIVERING ELECTRICAL INDICATOR FOR FIREDAMP. E. & M. J., vol. 86, p. 627 $\frac{1}{2}$ column

FIREDAMP: Its Composition, Detection and Estimation. By T. Gray. T. I. M. E., vol. 39, p. 286. 19 pages.

EXAMINING FOR FIREDAMP. By J. Ashworth. M. & M., vol. 30, p. 153. $5\frac{1}{2}$ columns.

APPARATUS FOR THE DETECTION OF FIREDAMP. E. & M. J., vol. 88, p. 566. $\frac{3}{4}$ column.

NOTES ON A SMALL CONTRIVANCE TO MORE EASILY DETECT FIREDAMP. By W. C. Blackett. T. I. M. E., vol. 37, p. 276, $4\frac{1}{2}$ pages, I.; p. 441, $2\frac{1}{2}$ pages

CARBON MONOXIDE DETECTOR T. I. M. E., vol. 37, p. 587 1 page I

TESTING FOR CARBON MONOXIDE IN CONNECTION WITH FIRES AND EXPLOSIONS IN MINES By J. S. Haldane T. I. M. E., vol. 38, p. 287. $14\frac{1}{2}$ pages.

TESTS FOR CARBON MONOXIDE M. & M., vol. 31, p. 33 $\frac{1}{4}$ column.

THE CUNYNGHAME-CADMAN GAS-DETECTING DEVICE. By E. A. Hallwood T. I. M. E., vol. 39, p. 13. $4\frac{1}{2}$ pages. I.

See also **ESTIMATION OF QUANTITY OF GASES**

See also **SAFETY LAMPS** and **TESTING BY SAFETY LAMPS**.

Mine Gases and Barometric Pressure

THE BAROMETRIC AND TEMPERATURE CONDITIONS AT THE TIME OF DUST EXPLOSIONS IN THE APPALACHIAN COAL MINES By N. H. Mannakee. T. A. I. M. E., vol. 40, p. 655. 12 pages.

BAROMETRIC PRESSURE AND LIBERATION OF FIREDAMP. By L. Moir. E. & M. J., vol. 90, p. 565. 11 columns. D.

INFLUENCE OF BAROMETRIC CHANGES ON VENTILATION E. & M. J., vol. 85, p. 1012. $1\frac{1}{2}$ columns.

EFFECT OF ATMOSPHERIC PRESSURE ON EXUDATION. By W. H. Booth. Colliery Engineer, vol. 14, p. 104

BAROMETER AND FIREDAMP EXPLOSIONS. Colliery Engineer, vol. 10, p. 209.

BAROMETRIC PRESSURE AND MINE EXPLOSIONS E & M J, vol. 85, p. 36. 1 column

CONSIDERATION OF SUPPOSED ATMOSPHERIC INFLUENCE IN CONNECTION WITH COLLIERY EXPLOSIONS By J. Warburton Colliery Engineer, vol. 8, p. 257

See also **MINE EXPLOSIONS and DUST AS AN EXPLOSIVE AGENT.**

Estimation of Quantity of Gases

THE ESTIMATION OF CARBON MONOXIDE IN MINE GAS By E. H. Weiskopf. P. C. M. & M. Soc. S. A., vol. 9, p. 258, 15½ columns, 1; p. 307, 1½ columns

IODOMETRIC DETERMINATION OF SMALL QUANTITIES OF CARBON MONOXIDE. P. C. M. & M. Soc. S. A., vol. 6, p. 137. ¼ column

See also **DETECTION AND TESTING FOR MINE GASES.**

MINING LAW

Mining Law: Its Principles and Applications

MINING LAW. By E. R. L. Gould. U. S. G. S., Mineral Resources, 1886, vol. 8.

UNIFORM MINING LAWS Min. & Sci. Press, vol. 101, p. 438 10½ columns.

MINING LEGISLATION J. C. M. I., vol. 13, p. 8 4½ pages

SHORT TALKS ON MINING LAW By A. H. Ricketts E & M. J., vol. 85, p. 948, 4½ columns; p. 1037, 5½ columns; vol. 86, p. 81, 4 columns; p. 117, 6½ columns; p. 168, 1½ columns; p. 212, 3½ columns; p. 363, 6 columns; p. 460, 4 columns; p. 527, 3½ columns; p. 570, 9 columns; p. 851, 5 columns; vol. 87, p. 547, 8 columns; p. 639, 2½ columns.

HISTORICAL SKETCH OF MINING LAW. By R. W. Raymond U. S. G. S., Mineral Resources 1883 and 1884, vol. 14 19 pages.

GEOLOGIC BASIS OF MINING LAW. By C. De Kalb Min. & Sci. Press, vol. 100, p. 642. 11½ columns.

TRESPASS IN MINING. E. & M. J., vol. 86, p. 460 1½ columns.

THE FOREST SERVICE AND MINING IN THE NATIONAL FOREST. By W. W.

Dyar Min. & Sci. Press, vol. 99, p. 618. 8 columns

THE FOREST RESERVE AND THE MINING LAWS. E & M. J., vol. 85, p. 270 1½ columns.

WHAT SHOULD BE INCLUDED IN A COURSE IN ENGINEERING JURISPRUDENCE. By A. H. Blanchard. P. Soc. P. E. E., vol. 15, p. 673. 6 pages.

ENGINEERING JURISPRUDENCE, AN ESSENTIAL IN THE ENGINEERING CURRICULUM. By A. H. Blanchard. P. Soc. P. E. E., vol. 11, p. 171. 7 pages.

See also **MINING EDUCATION and ENGINEERING SCHOOLS.**

WHAT SHOULD AN ENGINEER KNOW OF LAW. By C. De Kalb. Min. & Sci. Press, vol. 99, p. 849 5½ columns

See also the **ENGINEER AND ENGINEERING ETHICS**

Mining Law of the Various States and Countries

GROWTH OF AMERICAN AND AUSTRALIAN MINING LAW By A. C. Veatch. E. & M. J., vol. 89, p. 716. 16½ columns.

NEW ZEALAND AND AMERICAN MINING LAW: A Contrast. By A. C. Veatch. Min. & Sci. Press, vol. 101, p. 274. 3½ columns.

DEVELOPMENT AND OPERATION OF THE MINING LAW OF NEW ZEALAND. By A. C. Veatch. Min. & Sci. Press, vol. 101, p. 338. 4 columns.

MINING LEGISLATION IN QUEENSLAND, AUSTRALIA. By A. C. Veatch. E. & M. J., vol. 90, p. 448. 3½ columns.

MINING LAWS OF BAHIA, BRAZIL. E. & M. J., vol. 87, p. 1032. ½ column.

CANADIAN INDUSTRIAL DISPUTES ACT. By F. A. Rose. Min. & Sci. Press, vol. 96, p. 104. 2 columns.

QUEBEC MINING LAW. E. & M. J., vol. 87, p. 1046. 1 column.

MINING LAWS OF QUEBEC AND ONTARIO. By T. F. Van Wagenen. Min. & Sci. Press, vol. 101, p. 476. 4 columns. Map.

DEFICIENCIES IN CANADIAN MINING LAWS: A Plea for Improvement and Unification. By H. Mortimer-Lamb. J. C. M. I., vol. 13, p. 478. 11 pages.

MINING REGULATIONS IN CHINA. Min. & Sci. Press, vol. 96, p. 298. 1½ columns.

PROPRIETORSHIP, MINING REGULATIONS AND CUSTOMS IN THE YUNNAN TIN DISTRICT, CHINA. T. I. M. & M., vol. 19, p. 189. 1 page.

ANCIENT MINING CUSTOMS IN THE PEAK DISTRICT OF DERBYSHIRE. By H. L. Terry. E. & M. J., vol. 88, p. 256. 2 columns.

THE NEW ILLINOIS MINING LAW. M. & M., vol. 31, p. 761. 4½ columns.

MINING LICENCES IN INDIA. Min. & Sci. Press, vol. 95, p. 500. ½ column.

A TOPICAL DIGEST OF THE MEXICAN MINING LAW. E. & M. J., vol. 89, p. 416. 10½ columns.

THE PROPOSED NEW MINING LAW OF MEXICO. By R. E. Chism. E. & M. J., vol. 88, p. 216. 9 columns.

MEXICAN MINING LAW. M. & M., vol. 30, p. 416. 2 columns.

MINING LAW OF NICARAGUA. T. A. I. M. E., vol. 41, p. 599. 3 pages.

THE COLLIERY LAW OF OKLAHOMA. E. & M. J., vol. 86, p. 729. 3½ columns.

PENNSYLVANIA BITUMINOUS MINE LAW. M. & M., vol. 29, p. 416. 3½ columns.

MINING LAWS OF SANTO DOMINGO. By C. A. Haussler. M. & M., vol. 31, p. 580. 1½ columns.

THE MINE LAW OF WEST VIRGINIA. By P. A. Grady. M. & M., vol. 31, p. 370. 3½ columns.

MINING LAWS IN WISCONSIN ZINC DISTRICT. By J. E. Kennedy. E. & M. J., vol. 87, p. 861. 3 columns.

See also **MINE REGULATIONS.**

MINING LAWS IN CHILE. T. I. M. E., vol. 38, p. 39. 4 pages.

Mineral Land Acts and Federal Mining Laws

CLASSIFICATION OF PUBLIC LANDS. By G. O. Smith. Min. & Sci. Press, vol. 99, p. 229. 4½ columns.

THE MINING MAN'S INTEREST IN LAND CLASSIFICATION. By G. O. Smith. Min. & Sci. Press, vol. 99, p. 501. 4 columns.

THE LAW OF MINES AND REAL ESTATE. Min. Mag., vol. 2, p. 166. 2½ pages.

ACQUISITION OF PUBLIC OIL LANDS. By W. Forstner. Min. & Sci. Press, vol. 101, p. 171. 4½ columns.

PUBLIC LANDS AND NEEDED LEGISLATION. By R. A. Ballinger. Min. & Sci. Press, vol. 99, p. 748. 5½ columns.

EFFICIENCY IN THE ADMINISTRATION OF THE PUBLIC LANDS OF A NATION. By A. C. Veatch. E. & M. J., vol. 87, p. 1048. 3 columns.

PRICING PUBLIC COAL LANDS. E. & M. J., vol. 87, p. 1137. 3 columns.

See also **VALUE OF MINES, ETC.**

MINERALS UNDER RAILWAYS AND STATUTORY WORKS. By J. H. Cockburn. T. I. M. E., vol. 39, p. 104. 32 pages.

TIDE LANDS. E. & M. J., vol. 87, p. 639. $\frac{1}{2}$ column.

See also **RIPARIAN AND WATER RIGHTS.**

CALIFORNIA OIL AND ASPHALT LANDS. E. & M. J., vol. 87, p. 1233. $1\frac{1}{2}$ columns.

THE PHOSPHATE LAND QUESTION. E. & M. J., vol. 87, p. 505. $2\frac{1}{2}$ columns

DISPOSAL OF PHOSPHATE LANDS E. & M. J., vol. 87, p. 406. $2\frac{1}{2}$ columns

See also **OCCURRENCE OF PHOSPHATES and DECISIONS**

Extra-Lateral Rights and the Law of the Apex

A BROAD APEX Min. & Sci. Press, vol. 95, p. 214. 1 column.

A BROAD APEX. Min. & Sci. Press, vol. 95, p. 586. $8\frac{1}{2}$ columns I.

EXTRA-LATERAL RIGHTS AGAIN. By H. V. Winchell. Min. & Sci. Press, vol. 100, p. 648. 2 columns. D.

VERTICAL SIDE LINE LAW. M. & M., vol. 30, p. 270 $1\frac{1}{2}$ columns

Claims, Taxes, Assessments and Locations

ASSESSMENT WORK. Min. & Sci. Press, vol. 95, p. 679. $1\frac{1}{2}$ columns.

HOW TO ACQUIRE TITLE TO MINING CLAIMS IN MEXICO. Min. & Sci. Press, vol. 96, p. 331. 1 column.

ANNUAL LABOR PENDING PATENT PROCEEDINGS. By H. W. MacFarran, Min. & Sci. Press, vol. 100, p. 800. $2\frac{1}{2}$ columns.

ASSESSMENT WORK ON MINING CLAIMS. By W. E. Colby. Min. & Sci. Press. vol. 97, p. 808. $3\frac{1}{2}$ columns.

LOCATION OF CLAIMS E. & M. J., vol. 86, p. 117. 4 columns.

APPLICATION FOR MINE PATENT E. & M. J., vol. 87, p. 597. 7 columns.

PATENTING MINING CLAIMS. E. & M. J., vol. 87, p. 1146. $2\frac{1}{2}$ columns.

PATENTING MINERAL LAND By G. A. Packard. Min & Sci Press, vol. 99, p. 526. $5\frac{1}{2}$ columns.

MINING PATENTS. E & M. J., vol. 86, p. 572. 2 columns

DEPUTY MINERAL SURVEYORS AND MINERAL LOCATIONS. By H. W. MacFarran Min. & Sci. Press, vol. 101, p. 120. 3 columns.

MINERAL DEPOSITS ON PRIVATE LAND CLAIMS. E. & M. J., vol. 89, p. 1227. $\frac{3}{4}$ column.

FOREST SERVICE AND MINING CLAIMS. Min & Sci. Press, vol. 98, p. 756. 3 columns

MINING CLAIMS ON FOREST RESERVES Min. & Sci. Press, vol. 96, p. 887 $2\frac{1}{2}$ columns

MINING CLAIMS ON FOREST RESERVES. Min. & Sci. Press, vol. 97, p. 3, 2 columns; p. 165, 2 columns.

SIZE AND REGULATIONS OF MINING LOTS IN THE JOPLIN LEAD AND ZINC REGION, MISSOURI. T. A. I. M. E., vol. 38, p. 323. $1\frac{1}{2}$ pages

THE ALASKA COAL CASES By H. V. Winchell. E. & M. J., vol. 89, p. 860. $9\frac{1}{2}$ columns

See also **ALASKA and OCCURRENCE OF COAL.**

PLACER CLAIMS E. & M. J., vol. 86, p. 212. $1\frac{1}{2}$ columns.

See also **HYDRAULIC MINING.**

PARALYSIS OF MINING BY THE HOLDING OF IDLE CLAIMS. By E. B. Kirby. E & M. J., vol. 88, p. 767. $8\frac{1}{2}$ columns.

See also **RATING AND TAXATION OF MINING PROPERTY, MINERAL LAND ACTS AND FEDERAL MINING LAWS,** also first volume of **INDEX,** also **COST OF SURVEYING.**

Mining Leases

MINING LEASES E. & M. J., vol. 86, p. 571. 1 column.

LEASE OF A MINE A Case in Question. Min. & Sci. Press, vol. 101, p. 558. $\frac{1}{2}$ column.

LEASING THE FEDERAL COAL LANDS. By H. F. Bain Min. & Sci. Press, vol. 96, p. 73 3 columns.

LEASEHOLD SYSTEM FOR MINERAL LANDS. Min. & Sci. Press, vol. 100, p. 193. $2\frac{1}{2}$ columns.

LEASING PUBLIC OIL LANDS. E. & M. J., vol. 88, p. 1265 $2\frac{1}{2}$ columns.

THE LEASING OF PUBLIC OIL LANDS. M. & M., vol. 30, p. 399 $1\frac{1}{2}$ columns.

LEASE SYSTEM IN THE WISCONSIN ZINC DISTRICT. E & M J, vol. 87, p. 861. 3 columns

LEASES OF PHOSPHATE LANDS. E & M J, vol. 87, p. 265. $\frac{1}{2}$ column.

See also MINERAL LAND ACTS AND FEDERAL MINING LAWS.

AUSTRALIAN MINERAL LEASING. By A. C. Veatch. E. & M J., vol. 87, p. 1133. $4\frac{1}{2}$ columns.

MILL AND TUNNEL SITES E. & M J., vol. 86, p. 212. 1 column.

LAW OF MILL-SITES Min. & Sci. Press, vol. 98, p. 492. $\frac{1}{2}$ column.

DRAINAGE AND OTHER EASEMENTS IN MINING E & M. J., vol. 86, p. 570. 1 column.

See also first volume of INDEX.

Tunnel Rights and Tunnel and Mill Sites

See first volume of INDEX.

Riparian and Water Rights

WATER RIGHTS. E. & M. J., vol. 87, p. 639. $\frac{1}{2}$ column.

See also first volume of INDEX.

Decisions

JUSTICE TO THE MINER IN TIMBER AND MINERAL LAND DECISIONS E. & M. J, vol. 86, p. 189. 2 columns.

A RECENT DECISION ON A NEVADA "WILDCAT" PROMOTION E. & M. J, vol. 88, p. 318 1 column

BRITISH COLUMBIA MINING LITIGATION: Star vs White By E. Jacobs E. & M. J., vol. 88, p. 154. $1\frac{1}{2}$ columns.

MINERAL LAND: An Important Decision. Min. & Sci. Press, vol. 95, p. 123 $2\frac{1}{2}$ columns.

See also MINERAL LAND ACTS and FEDERAL MINING LAWS, and first volume of INDEX.

Mining Royalties

ROYALTIES IN THE LAKE SUPERIOR IRON DISTRICTS. E. & M. J., vol. 87, p. 742. $1\frac{1}{2}$ columns

ROYALTIES FOR COAL IN WEST VIRGINIA. M. & M., vol. 29, p. 511. $\frac{1}{2}$ column.

MINING ON A ROYALTY BASIS IN THE JOPLIN DISTRICT. By L. L. Wittich M. & M., vol. 30, p. 665. $6\frac{1}{2}$ columns. I.

ROYALTIES ON MINERALS IN ONTARIO. By J. M. Clark J. C. M. I., vol. 10, p. 340. $1\frac{1}{2}$ pages.

ROYALTY REDUCTIONS BY THE ONTARIO GOVERNMENT. By W. F. Boericke. E & M. J, vol. 89, p. 4. 1 column.

See also MINING LEASES and first volume of INDEX.

MINE LIGHTING**illumination of Mines and Buildings**

ILLUMINATION IN MINES. By L. W. Mayer. E & M. J., vol. 86, p. 967. 1 column.

ON LIGHTING MINES BY GAS. Min. Mag, vol. 10, p. 229. 1 page.

THE TESTING OF MINER'S OIL. By C. E. Scott M. & M., vol. 31, p. 764. $5\frac{1}{2}$ columns. I.

THE TESTING OF MINER'S OIL By C. E. Scott. E. & M. J., vol. 87, p. 511. 1½ columns

"BLUE GAS": A New Illuminant Used in Germany. By R. Grimshaw. E. & M. J., vol. 87, p. 465 ¾ column.

See also first volume of INDEX.

Electricity for Mine Lighting

INCANDESCENT LAMPS IN COAL MINES. P. C. M. & M. Soc. S. A., vol. 6, p. 142. ½ column.

THE USE OF ELECTRIC LAMPS FOR MINERS, WITH SPECIAL REFERENCE TO THE "FLOAT" LAMP. By M. H. Mills. T. I. M. E., vol. 37, p. 344. 8½ pages. I.

THE HUBBELL ELECTRIC MINE LAMP. M. & M., vol. 31, p. 127. 1½ columns I

See also **ELECTRICITY IN THE MINE**, and first volume of INDEX

See also **SAFETY LAMPS, TESTING BY SAFETY LAMPS and COST OF LIGHTING**

Acetylene Gas for Mine Lighting

ACETYLENE LIGHTING By N. Good-year. Min. & Sci. Press, vol. 95, p. 460. 1½ columns.

ACETYLENE LAMPS UNDERGROUND. E. & M. J., vol. 87, p. 177. ½ column.

ACETYLENE MINE LAMPS By A. C. Morrison. Min. & Sci. Press, vol. 98, p. 155. 1½ columns.

ACETYLENE LAMPS FOR MINES. By A. C. Morrison. E. & M. J., vol. 87, p. 272. 1½ columns

A PORTABLE ACETYLENE MINE LAMP. By E. O. Dane. Min. & Sci. Press, vol. 95, p. 26. ½ column I.

See also **COST OF LIGHTING**.

Candles, Etc.

See **COST OF LIGHTING**.

See first volume of INDEX.

Lighting Shafts

See first volume of INDEX.

Safety Lamps and Testing by Safety Lamps

THE WOLF-BOHNS ELECTRIC SAFETY LAMP By R. Cremer. E. & M. J., vol. 87, p. 898. 1 column

A NEW TYPE OF ENGLISH SAFETY LAMP. E. & M. J., vol. 89, p. 1173. 1½ columns.

THE PIELER SAFETY LAMP E. & M. J., vol. 89, p. 1076. ½ column.

SOME RECENT IMPROVEMENTS IN MINER'S SAFETY LAMPS. By T. R. Stopford. T. I. M. E., vol. 39, p. 800. 4 pages. I

A SAFETY LAMP GLASS TEST. E. & M. J., vol. 88, p. 781. 1½ columns.

SAFETY LAMP RELIGHTING APPARATUS. By F. C. Perkins. M. & M., vol. 30, p. 696. 2 columns. I.

THE FERRO-CERIUM LIGHTER FOR SAFETY LAMPS E. & M. J., vol. 88, p. 451. 2½ columns.

See also **PROPERTIES OF VARIOUS METALS**

ELECTRIC SAFETY LAMP EXPERIMENTS AT CAMPHAUSEN, GERMANY. T. I. M. E., vol. 37, p. 693. 2 pages.

A NEW ELECTRIC SAFETY LAMP FOR MINERS. T. I. M. E., vol. 39, p. 804. 1 page. I

See also **ELECTRICITY FOR MINE LIGHTING and ELECTRICITY IN THE MINE**.

SAFETY LAMPS IN THE COAL MINES OF FOREIGN COUNTRIES. E. & M. J., vol. 87, p. 196. 1 column.

SAFETY LAMPS VS. NAKED LIGHTS. E. & M. J., vol. 90, p. 83. 2½ columns.

THE ABOLISHMENT OF SAFETY LAMPS IN THE ALABAMA COAL MINES. E. & M. J., vol. 90, p. 326. 1½ columns.

THE SAFENESS OF VARIOUS TYPES OF SAFETY LAMPS By J. B. Marsaut. E. & M. J., vol. 88, p. 980 6½ columns. I.

See also PROTECTION IN MINING

A STUDY OF LAMP FLAME CAPS By G. H. Winstanley. M. & M., vol. 30, p. 697. 5½ columns. I.

FIREDAmp CAPS AND THE DETECTION OF FIREDAmp IN MINES BY MEANS OF SAFETY LAMPS By E. B. Whalley and W. M. Tweedle. T. I. M. E., vol. 38, p. 509. 14 pages. I.

AN APPARATUS TO FACILITATE THE PROLONGED AND CAREFUL STUDY OF GAS-CAPS PRODUCED ON THE FLAME OF AN ORDINARY SAFETY LAMP BY ACCURATELY DETERMINED PERCENTAGES OF FIREDAmp. By G. H. Winstanley. T. I. M. E., vol. 38, p. 235. 10 pages. I.

EQUIPMENT FOR THE STUDY OF FLAME-CAPS AND FOR MISCELLANEOUS EXPERIMENTS ON SAFETY LAMPS. By G. R. Thompson. T. I. M. E., vol. 38, p. 524 44 pages. I.

See also DETECTION AND TESTING OF MINE GASES.

MINING

General

STATE AID TO MINING. P. C. M. & M. Soc S A, vol. 7, p. 381. 3 columns.

See also MINING EDUCATION.

A MODEL COAL MINE IN WESTPHALIA. By W. S. Hall. E & M. J., vol. 87, p. 1135. 6½ columns. I.

PRACTICAL AND ECONOMICAL MINING. By N. A. Nicholson. J. M Soc. N. S., vol. 15, p. 83. 5 pages

MODERN PROGRESS IN MINING AND METALLURGY IN THE WESTERN UNITED STATES By D. W. Brunton. T. A. I. M. E., vol. 40, p. 543, 19½ pages; Discussion, p. 881, 20½ pages.

See also HISTORY OF MINING.

OBSERVATIONS IN COAL MINES OF EUROPE By F. Haas. E & M J., vol. 89, p. 730. 7½ columns.

MINING IN TROPICAL CLIMATES. By J. P. Hutchins M. & M., vol. 30, p. 513. 7½ columns. I

GLIMPSSES UNDERGROUND By T. A. Rickard. Min. & Sci. Press, vol 100, p. 678. 4½ columns. I

DISTRIBUTION OF BEDDED LEADS IN RELATION TO MINING POLICY By J. E. Woodman. J. M Soc. N. S., vol. 10, p. 79 18 pages.

See also MINE ORGANIZATION.

Bureau of Mines

THE BUREAU OF MINES BILL. Min. & Sci Press, vol. 96, p. 103. 2 columns

NATIONAL MINING BUREAU Min. & Sci. Press, vol. 96, p. 165 8 columns. D.

THE TECHNOLOGIC BRANCH OF THE UNITED STATES GEOLOGICAL SURVEY. By G. S. Rice. M. & M., vol. 29, p. 435. 11 columns. I.

THE WORK OF THE CANADIAN DEPARTMENT OF MINES By E Haanel. J M Soc. N. S, vol. 13, p. 101. 6½ pages.

THE VALUE OF A PROVINCIAL DEPARTMENT OF MINES AND GEOLOGY. By W G. Miller. J M Soc. N. S., vol 13, p. 137. 7 pages

HISTORY OF GOVERNMENT OF MINING. By R. McLarn. T I M E., vol. 37, p. 200 10 pages.

THE CENSUS SCHEDULES FOR MINES AND QUARRIES. E & M. J., vol. 88, p. 1183. 3½ columns

Mine Reports

CURRENT MONTHLY REPORTS OF MINES. By H. S. Denny. E. & M. J, vol. 85, p 1134. 8½ columns.

GEOLOGIC ESSENTIALS OF A MINE REPORT. By C. De Kalb Min & Sci. Press, vol. 98, p. 625 7½ columns.

History of Mining

BOUNDARIES OF THE UNITED STATES AND OF THE SEVERAL STATES AND TERRITORIES, WITH AN OUTLINE OF THE HISTORY OF ALL IMPORTANT CHANGES OF TERRITORY. By H. Gannett U S G. S., Bull. 171, 142 pages, I., 1900, Bull. 226, 145 pages, I., 1904

THE ORIGIN OF CERTAIN PLACE NAMES IN THE UNITED STATES By H. Gannett. U S G. S., Bull. 197, 280 pages, 1902; Bull. 258, 334 pages, 1905.

NOTES ON THE EARLIEST DISCOVERIES IN AMERICA. Min & Sci Press, vol. 20, p. 35. ½ column

EARLY MINING IN CALIFORNIA By J. McGillivray. Min & Sci. Press, vol. 100, p. 738. 1 column

RAMBLING RECOLLECTIONS OF AN OLD SIXTY-NINER By A. D. Hodges. Min. & Sci Press, vol. 100, p. 715 4½ columns

TWENTY-THREE YEARS A MINING EDITOR By C. G. Yale. Min & Sci Press, vol. 100, p. 711 8 columns. I.

THE EARLY HISTORY OF ANTHRACITE MINING. By H. H. Lawrence. Coal Mining Supplement, E & M. J., vol. 88, p. 1. 9 columns I.

THE FIRST COAL SHAFT IN INDIANA. E. & M. J., vol. 85, p. 176. ½ column.

HISTORY OF COAL MINING IN PICTOU COUNTY, NOVA SCOTIA. E & M. J., vol. 85, p. 1102 1 column.

THE LAST OF THE JERSEY FORGES. By E. P. Buffet. E. & M. J., vol. 85, p. 309. 4½ columns. I.

CHRONOLOGY OF LEAD MINING IN THE UNITED STATES. By W. R. Ingalls. T. A. I. M. E., vol. 38, p. 644. 12 pages.

SILVER: History and Occurrence. By T. F. Van Wagenen Min & Sci. Press, vol. 97, p. 392. 7½ columns

HISTORY OF MINING ON THE COMSTOCK Min & Sci. Press, vol. 97, p. 496, 3 columns; p. 570, 13½ columns, I.

DECLINE AND REVIVAL OF COMSTOCK MINING. By W. Symmes Min. & Sci. Press, vol. 97, p. 496, 8½ columns, I.; p. 570, 13½ columns, I.

COMSTOCK BEGINNINGS By J. T. Goodman. Min. & Sci Press, vol. 99, p. 19. 6 columns. I

DISCOVERY OF THE GREAT COMSTOCK MINE. By D. De Quille Min & Sci. Press, vol. 99, p. 22. 3½ columns.

See also NEVADA.

DISCOVERY OF THE AMERICAN NETTIE MINE E. & M. J., vol. 90, p. 758 1½ columns

THE TRUE STORY OF THE CAMP BIRD DISCOVERY. E. & M. J., vol. 89, p. 1266 2½ columns.

DISCOVERY OF THE CAMP BIRD MINE By T. F. Walsh. E & M J, vol. 86, p. 223. 4 columns

EARLY COLORADO DAYS. By G. W. Maynard. Min. & Sci. Press, vol. 98, p. 789. 7½ columns

MINES AND MILLS OF COLORADO By A. B. Paul Min & Sci Press, vol. 20, p. 18, 1½ columns; p. 34, ½ column; p. 50, ½ column, p. 114, 1½ columns; p. 146, 1½ columns; p. 178, 1 column, p. 210, 1½ columns; p. 234, 1 column; p. 250, 1½ columns.

HISTORY OF IRON HILL, LEADVILLE E & M. J., vol. 89, p. 261 1 column.

See also COLORADO

DISCOVERY OF THE GOLD ROAD MINE. By J. C. Kennedy. Min. & Sci. Press, vol. 101, p. 773. 1½ columns.

HISTORICAL RÉSUMÉ OF THE COPPER QUEEN MINE. E & M J, vol. 87, p. 409. 6 columns

EARLY COPPER MINING IN THE PROVINCE OF QUEBEC. By J. Douglas. J. C. M. I., vol. 13, p. 254. 19 pages.

THE COPPER AND IRON REGION OF LAKE SUPERIOR. Min. Mag., vol. 1, p. 261. 7½ pages.

HISTORY OF THE OLDEST COPPER MINE IN AMERICA. M & M., vol. 31, p. 235. 10½ columns. I.

DISCOVERY OF IRON AND COPPER IN THE LAKE SUPERIOR REGION. T. L. S. M. I., vol. 14, p. 22. 3 pages.

HISTORICAL SKETCH OF COPPER MINING ON LAKE SUPERIOR. By A. Meads. T. L. S. M. I., vol. 14, p. 202. 2 pages. I.

HISTORY OF THE COPPER REGION OF LAKE SUPERIOR. Min. Mag., vol. 10, p. 124. 18½ pages.

See also OCCURRENCE OF COPPER AND COPPER ORES

THE STORY OF THE BINGHAM CANYON. By H. W. MacFarren. Min. & Sci. Press, vol. 99, p. 129. 3½ columns. I.

THE MINING HISTORY OF MOUNT LYELL, AUSTRALIA. T. A. I. M. E., vol. 10, p. 41. 14 pages.

ROUND MOUNTAIN MINES AND HISTORY, NEVADA. By J. P. Loftus. Min. & Sci. Press, vol. 99, p. 568. 1½ columns. I.

OLD METHODS IN MEXICO. Min. & Sci. Press, vol. 95, p. 372. 4 columns.

HISTORY OF THE EL TIGRE MINE, MEXICO. M & M., vol. 29, p. 483. 3 columns.

COAL MINING BY THE MONKS IN ENGLAND. By J. B. Simpson. T. I. M. E., vol. 39, p. 573. 28 pages.

REMINISCENCE OF MINING IN CORNWALL. By J. Vivian. Min. & Sci. Press, vol. 100, p. 743. 4½ columns.

HISTORY OF THE BARBERTON GOLDFIELD. P. C. M. & M. Soc. S. A., vol. 10, p. 122. 10 columns. I.

See also AFRICA.

HISTORY AND REVIEW OF THE NITER INDUSTRY OF CHILE. By M. R. Lamb. E. & M. J., vol. 90, p. 18. 14½ columns. I.

HISTORY OF THE COAL FIELDS OF CHILE. T. I. M. E., vol. 38, p. 31. 3 pages.

See also CHILE.

GOLD MINES OF TIBET. By A. Del Mar. Min. & Sci. Press, vol. 100, p. 254. 3½ columns.

THE LED MULE LODE. E & M J., vol. 89, p. 1146. 1 column.

WASHED HIS HOME FOR GOLD: A CURIOUS INCIDENT AS TO DISCOVERY OF GOLD. M. & M., vol. 31, p. 677. Note.

See also GENERAL MINING.

Inspection of Mines

DUTIES OF A MINE FOREMAN IN THE BITUMINOUS FIELDS OF PENNSYLVANIA. M & M., vol. 29, p. 94. ½ column.

MINE INSPECTION. By C. De Kalb. Min. & Sci. Press, vol. 99, p. 497. 4 columns.

INSPECTION OF MINES. By J. A. Holmes. Min. & Sci. Press, vol. 99, p. 499. 1½ columns.

ANTHRACITE MINE INSPECTION. By L. M. Evans. Coal Mining Supplement, E & M. J., vol. 88, p. 20. 4½ columns.

MINE INSPECTION IN UTAH MINES. By A. C. Watts. M. & M., vol. 30, p. 324. 4½ columns.

MINE INSPECTION IN GREAT BRITAIN. M. & M., vol. 30, p. 316. 2½ columns.

THE LEGAL DUTIES OF THE FIRE BOSS IN THE BITUMINOUS MINES OF PENNSYLVANIA. M & M., vol. 29, p. 142. ½ column.

INSPECTION OF COAL PROPERTIES BY SUPERINTENDENTS, ENGINEERS, ETC. M & M., vol. 29, p. 119. 2½ columns. I.

MINE INSPECTION WITH RESPECT TO CAR ALLOTMENT. By H. B. Douglas. E. & M. J., vol. 88, p. 24. 6½ columns.

See also MINE REGULATION

Prospecting: Methods of Procedure, Equipping Camping Outfits, Etc.

PROSPECTING FOR PHOSPHATE ROCK.

By F. F. Wilson, Jr. E & M. J., vol 86, p 1148. 1 column

THE PROSPECTOR AND HIS FRIENDS.

Min & Sci. Press, vol 95, p. 680. 2 columns. I.

THE AMERICAN PROSPECTOR IN MEXICO AND HIS PROBLEMS

By T. Chase E. & M J, vol 87, p. 694. 2 columns.

SINKING TEST PITS.

E & M. J., vol. 88, p 328 $\frac{1}{2}$ column.

THE VALUE OF SURFACE TRENCHING.

M & M, vol 31, p 686 1 column.

PROSPECTING, DEVELOPING AND MINING.

By R. W. Brock. Min & Sci Press, vol. 100, p 860. 2 $\frac{1}{2}$ columns

HUNTING METALS FOR THEIR HIDES.

By H. W. Hixon E & M. J., vol. 88, p. 168. 5 $\frac{1}{2}$ columns

CHANCES FOR THE PROSPECTOR

By H. H Edgerton Min. & Sci Press, vol. 98, p. 479. 2 $\frac{3}{4}$ columns.

PROSPECTING FOR GOLD.

M. & M, vol 30, p. 277. 1 $\frac{1}{2}$ columns.

PROSPECTING IN CHIHUAHUA, MEXICO

By R. H. Burrows. Min. & Sci. Press, vol. 100, p. 392. 4 columns I.

A SCIENTIFIC SEARCH FOR A NEW GOLDFIELD

By R. T. Hill. E & M. J., vol. 86, p. 1157. 9 columns. I

PROSPECTING FOR ORES OF THE GOLD-FIELD TYPE

By J V Lewis E & M J., vol. 87, p. 1121 2 $\frac{1}{2}$ columns.

PROSPECTORS AND PROSPECTING IN NEVADA

By R T. Hill. E & M J., vol. 86, p. 1053. 3 $\frac{1}{2}$ columns.

PROSPECTING IN THE BARBERTON GOLD-FIELD

P. C. M. & M. Soc S. A., vol. 10, p. 127 2 $\frac{1}{2}$ columns.

PROSPECTING IN NICARAGUA.

T A. I. M E, vol. 41, p. 612 1 $\frac{1}{2}$ pages

PROSPECTING FOR SILVER

M. & M., vol 31, p. 289 2 columns.

PROSPECTING ONTARIO SILVER PROPERTIES

E. & M. J., vol 89, p. 1153. $\frac{1}{2}$ column.

PROSPECTING POVERTY GULCH CLAIMS.

M. & M, vol. 31, p 694. 7 columns I.

TESTING PLACER GROUND

E & M J., vol. 87, p. 223 2 $\frac{1}{2}$ columns.

PROSPECTING AND MINING GOLD PLACERS IN ALASKA.

By J. P Hutchins U. S G S., Bull 345, p. 54 24 pages 1907.

DISCOVERY OF PLACER GOLD.

E & M J., vol. 88, p. 103. 2 columns.

TESTING PLACERS IN KOREA.

By R. Y. Hadlon. Min & Sci Press, vol 101, p 475. 2 columns. I

See also AURIFEROUS GRAVELS and HYDRAULIC MINING.

PROSPECTING FOR COAL.

By B. Halberstadt. M. & M, vol 30, p 454. 4 $\frac{1}{2}$ columns. I

PROSPECTING ANTHRACITE MINES BY DRILL HOLES.

By F. Lynde. E & M. J., vol. 88, p 258. 9 columns I.

SYSTEMATIC EXPLORATION IN THE PITTSBURG COAL-SEAM.

By F. Z. Schellenberg T A I M. E, vol 41, p. 225 12 pages I

PROSPECTING DISSEMINATED COPPER ORE DEPOSITS.

By C R. Keyes. E & M J, vol. 90, p. 1055 4 $\frac{1}{2}$ columns

PROSPECTING IN THE MESABI IRON RANGE

M. & M, vol 29, p. 293. 2 columns.

PROSPECTING FOR TIN ON CAPE PRINCE OF WALES.

Min. & Sci Press, vol 95, p. 746. $\frac{1}{2}$ column

PROSPECTING FOR TIN IN SIAM

By G B Adeney. Min Mag, London, vol 3, p 287. 2 columns. I.

PROSPECTING AND TESTING OF CLAY DEPOSITS.

By E. K. Soper. Min. & Sci. Press, vol. 100, p. 827. 7 $\frac{1}{2}$ columns.

See also OCCURRENCE OF WORKABLE CLAYS.

PROSPECTING IN SIBERIA. Min & Sci Press, vol. 20, p. 354. 1 column.

PROSPECTING IN THE NORTH. By H. V. Winchell. Min. Mag., London, vol. 3, p. 436. 4½ columns.

PROSPECTING IN CHINA. By G. F. Ober. Min Mag London, vol. 4, p. 223. 1½ columns

See also CHINA.

See also PROSPECT DRILLING, and first volume of INDEX, also COST OF PROSPECTING.

Divining

USE OF THE DIVINING ROD Min & Sci. Press, vol. 95, p. 500. ½ column.

THE DIVINING ROD. Min & Sci Press, vol. 101, p. 711. ½ column

DIVINING RODS By E. S. Giles Min & Sci. Press, vol. 97, p. 151 ½ column

THE DIVINING ROD: A Scientific Test. E. & M. J., vol. 85, p. 1158. 1½ columns.

THE DIVINING ROD. By R. W. Raymond. U. S. G. S., Mineral Resources, 1882, vol. 17. 17 pages.

THE DIVINING ROD. E. & M. J., vol. 85, p. 125. 1 column.

MINING DISCOVERY: The Divining Rod. Min. Mag., vol. 10, p. 51. 3 pages.

See also first volume of INDEX.

Value of Mines: Sampling and Estimation of Mines; Ore Reserves, Ore in Sight, Mine Reports, Etc.

THE PROFESSIONAL EXAMINATION OF UNDEVELOPED MINERAL PROPERTIES. By C. Catlett. T. A. I. M. E., vol. 39, p. 774. 8½ pages.

TO DETERMINE THE VALUE OF A MINE. Min. Mag., vol. 1, p. 607. 6 pages.

PRESENT VALUE OF MINES P. C. M. & M. Soc. S. A., vol. 5, p. 185 ½ column

RATING OF MINES: Principles Involved. E. & M. J., vol. 88, p. 24. 5 columns.

CALCULATION OF MINE-VALUES. By R. B. Brinsmade. T. A. I. M. E., vol. 39, p. 243. 7 pages

THE VALUATION OF MINING AREAS ON THE RAND By W. F. Wilkinson. T. I. M. & M., vol. 18, p. 348. 6 pages

GRAPHIC METHODS FOR MINE VALUATION. By H. C. Jenkins. Min. Mag., London, vol. 2, p. 287. 6 columns. I

THE COMPUTATION OF THE PRESENT VALUE OF DEVELOPED AND UNDEVELOPED MINES. By W. H. Goodchild. T. I. M. & M., vol. 18, p. 367. 46 pages. D.

ORE-VALUATION OF GOLD MINES T. A. I. M. E., vol. 39, p. 685. 9 pages. I

See also VALUE OF ORE AND ITS DETERMINATION.

ESTIMATE OF TONNAGE OF ORE AND STRIPPING M. & M., vol. 29, p. 344. 11 columns.

COMPUTING TONNAGE FROM VOLUME OF ORE REMOVED. By S. L. Lefevre and G. C. Stoltz. E. & M. J., vol. 87, p. 350. 1¼ columns. I.

THE VALUATION OF PUBLIC LANDS: The Value of Coal Land. By G. H. Ashley. U. S. G. S., Bull. 424. 75 pages. 1910.

DEPTH AND MINIMUM THICKNESS OF BEDS (COAL) AS LIMITING FACTORS IN VALUATION. By C. A. Fisher. U. S. G. S., Bull. 424. 75 pages. 1910.

VALUE OF COAL LAND M. & M., vol. 29, p. 366. ½ column

PLACER EXAMINATIONS. By A. Lakes. M. & M., vol. 29, p. 540. 7½ columns. I

CALCULATING VALUE IN PLACER GROUND By O. H. Packer. Min. & Sci. Press, vol. 101, p. 810. 3½ columns. D.

See also AURIFEROUS GRAVELS and
HYDRAULIC MINING

EXAMINATION OF PETROLEUM PROPERTIES. By C. Jarin Min & Sci. Press, vol 101, p 269 3½ columns.

SELLING A MINE E & M. J., vol. 88, p. 79. 2½ columns.

ORE RESERVES IN MINING Min. & Sci Press, vol 101, p 410. 2 columns.

ORE RESERVES OF WEST AUSTRALIA GOLD MINES E & M. J., vol 90, p. 458- 5½ columns

ESTIMATES OF ORE RESERVES T. A. I. M. E., vol 40, p 125 9 pages I

THE AUDITING OF ORE RESERVES By B I. Collings P. C. M & M Soc. S. A., vol. 5, p. 144, 2 columns; p. 206, 11½ columns; p 232, 7 columns; p. 309, 1½ columns.

NOTES ON THE ESTIMATION AND VALUATION OF ORE RESERVES. By W. R. Tait. P. C. M. & M. Soc. S. A., vol. 7, p 198, 10 columns; p 295, 1½ columns; p. 332, 2 columns; p 406, 2 columns.

See also BUYING AND SELLING ORE and VALUE OF ORE AND ITS DETERMINATION

See also DREDGING FOR GOLD AND OTHER MATERIALS.

VALUATION OF MINNESOTA MINERAL LANDS E. & M. J., vol. 84, p 558. 1 column.

See also COST OF MINE EXAMINATION.

Permanence in Depth

PERMANENCY IN DEPTH. Min & Sci. Press, vol. 96, p. 13. 1 column.

RATIO OF VALUE TO DEPTH. Min & Sci Press, vol. 101, p. 495. ½ column.

PERSISTENCE IN DEPTH OF TREADWELL ORES. U. S. G. S., Bull. 259, p 79. ½ page.

THE FACTORS THAT CONTROL THE DEPTH OF ORE DEPOSITS By J. W. Gregory T. Au. I. M. E., vol. 8, pt. 2, p. 127. 28 pages.

LIVES OF MINES. Min & Sci Press, vol. 97, p. 456. 2½ columns.

LIFE OF RAND MINES E. & M. J., vol 90, p 543 1 column

DECREASE OF VALUE IN ORE-SHOOTS WITH DEPTH. By F. L. Garrison. Min & Sci. Press, vol. 101, p. 511. 2½ columns.

DECREASE IN VALUE OF ORE WITH DEPTH, AT KALGOORLIE, WEST AUSTRALIA E. & M. J., vol. 85, p. 196. Table.

PROBABLE DEPTH TO WHICH MINING CAN BE CARRIED. P. C. M. & M. Soc S A., vol. 8, p 47. 2 columns.

DEPTH OF ORE AT GOLDFIELD. Min. & Sci Press, vol 96, p. 62 ½ column.

PERSISTENCY OF THE ORE IN THE NORTH CAROLINIAN GOLD BELT. E. & M J., vol. 87, p. 296. 2 columns

PERMANENCY OF THE RAND MINES. E. & M. J., vol 89, p 270. ½ column.

See also THEORY OF ORE DEPOSITS, ETC, and DEEP MINING, also DEVELOPMENT.

Development: Size, Shape, Depth and Arrangement of Shafts and Slopes

THE NECESSITY OF DISTINGUISHING BETWEEN PROSPECTING, DEVELOPING AND MINING. By R. W. Brock. J. C. M I., vol 13, p. 490. 5 pages.

PRELIMINARY DEVELOPMENT WORK. By A M. Bateman. J C. M. I., vol. 13, p. 621. 10½ pages I.

THE MISPLACEMENT OF MINING SHAFTS AND ADITS IN VICTORIA. By S Hunter. T Au I M. E., vol. 10, p. 326 14 pages. I.

DEVELOPMENT WORK IN MINING P. C. M. & M. Soc. S A., vol. 10, p 332. ½ column.

DEVELOPMENT OF MINES FOR DIFFERENT PITCH. M. & M., vol. 30, p. 588. 3½ columns. I.

- DEVELOPMENT OF A SLOPE MINE M. & M., vol. 30, p. 340. Map.
- SIZE AND DEPTH OF SOME SHAFTS IN AMERICA. M. & M., vol. 29, p. 392. $\frac{1}{2}$ column.
- CIRCULAR VS. RECTANGULAR SHAFT SINKING. By H. M. Payne. E & M. J., vol. 89, p. 231. 5 columns. I.
- ELLIPTICAL VS. RECTANGULAR SHAFTS. By W. A. Weldin. M & M., vol. 31, p. 167. 5 columns. I
- See also SHAFT SINKING
- THE INTERVAL BETWEEN LEVELS E. & M. J., vol. 85, p. 454. $\frac{3}{4}$ column.
- THE SYSTEMATIC DEVELOPMENT OF A COAL MINE. By W. Leckie. E & M. J., vol. 85, p. 863. 11 columns. I.
- SYSTEMATIC DEVELOPMENT IN PITTSBURG SEAM. By F. Z. Schellenberg. E & M. J., vol. 90, p. 521. 11 columns. I.
- ECONOMICAL DEVELOPMENT OF COAL MINES. By H. J. Nelms. E. & M. J., vol. 87, p. 800. $1\frac{1}{2}$ columns.
- PLAN OF DEVELOPMENT AT BOISSEVAIN, WEST VIRGINIA E & M. J., vol. 85, p. 866. 1 column. I
- METHOD OF DEVELOPING THE MINE "C," WYOMING E & M. J., vol. 90, p. 226. Plan.
- METHODS OF DEVELOPMENT IN THE COAL FIELDS OF SOUTHERN COLORADO M. & M., vol. 30, p. 588. $3\frac{1}{2}$ columns. I.
- DEVELOPMENT OF THE HOSMER COAL MINES. J. C. M. I., vol. 13, p. 242. 1 page. I.
- See also METHODS OF MINING COAL.
- METHOD OF DEVELOPMENT IN THE ITALY LIGNITE MINES E & M. J., vol. 89, p. 1176. $1\frac{1}{2}$ columns
- DEVELOPMENT IN THE PITCHING COAL SEAMS OF HAZLETON DISTRICT. Coal Mining Supplement, E & M. J., vol. 88, p. 25. $\frac{3}{4}$ column. I
- MINE DEVELOPMENT AT CANANEA, MEXICO. M. & M., vol. 30, p. 28. 2 columns.
- DEVELOPMENT OF THE MIAMI COPPER MINES. M. & M., vol. 30, p. 82. $\frac{1}{2}$ column. I.
- MINE DEVELOPMENT AT RAY, NEVADA. M. & M., vol. 29, p. 545. 1 column.
- DEVELOPMENT OF THE HELEN IRON MINE J. C. M. I., vol. 13, p. 123. 4 pages. I
- MINING; DEVELOPMENT OF THE IRON ORE MINES OF THE BIRMINGHAM DISTRICT, ALABAMA T. A. I. M. E., vol. 40, p. 113. 2 pages. I
- DEVELOPING A NEW ORE HORIZON IN THE JOPLIN DISTRICT By L. L. Wittich M & M., vol. 30, p. 637. $5\frac{1}{2}$ columns. I.
- DEVELOPMENT Sampling and Ore Valuation of Gold Mines By C. B. Horwood and Mungo Park. T. A. I. M. E., vol. 39, p. 685. 9 pages. I.
- See also MINE SAMPLING and VALUE OF MINES.
- DEVELOPMENT AT THE COMBINATION MINE Min. & Sci. Press, vol. 95, p. 435. 6 columns. I
- THE GIROUX SHAFT AT KIMBERLY, NEVADA. By C. E. Arnold. T. A. I. M. E., vol. 41, p. 536. $5\frac{1}{2}$ pages. I
- DEVELOPMENT AT THE CRESSON MINE, CRIPPLE CREEK, COLORADO M & M., vol. 31, p. 737. 2 columns
- DEVELOPING POVERTY GULCH CLAIMS. By C. W. Henderson M & M., vol. 31, p. 727. $8\frac{1}{2}$ columns. I
- METHOD OF DEVELOPMENT IN THE TREADWELL MINES. Min. & Sci. Press, vol. 97, p. 85. 4 columns. I.
- METHODS OF DEVELOPMENT ON THE RAND T. A. I. M. E., vol. 5, p. 46. $3\frac{1}{2}$ pages.
- THE DEEP SHAFTS OF THE RAND T. A. I. M. E., vol. 5, p. 44. $2\frac{1}{2}$ pages.
- See also DEEP MINING.
- DEVELOPMENT IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 86, 1 column, I.; p. 89, 9 columns, I.

METHOD OF DEVELOPING THE PILGRIM'S REST PROPERTY P. C. M. & M Soc. S. A., vol. 9, p. 296. $\frac{1}{2}$ column I.

DEVELOPMENT OF THE ST. JOHN DEL REY MINES IN BRAZIL. Min. Mag., London, vol. 3, p. 465. 1 column. I.

DEVELOPMENT OF THE EUGENE MINE, KOOTENAY, BRITISH COLUMBIA. E. & M J, vol. 89, p. 420. 1 column I.

THE DEVELOPMENT OF AN ORE SHOOT IN NOVA SCOTIA By E. P. Brown. J. M Soc. N S, vol. 12, p. 57. $4\frac{1}{2}$ pages. I.

DEVELOPMENT AT THE GRANBY MINES. J C M I, vol. 11, p. 394. $6\frac{1}{2}$ pages. I.

SHAFTS AT THE MOUNT MORGAN MINE. E & M J, vol. 87, p. 751 $1\frac{1}{2}$ columns.

DEVELOPMENT IN THE MEXICAN MINE, COMSTOCK LODGE Min & Sci Press, vol. 100, p. 420 2 columns. I.

RECENT WORK ON THE COMSTOCK. By W D O'Brien. Min. & Sci Press, vol. 96, p. 804. $4\frac{1}{2}$ columns. I.

METHOD OF DEVELOPMENT EMPLOYED AT THE LOS PILARES MINE, MEXICO M & M, vol. 31, p. 107. 1 column. I.

DEVELOPMENT AT THE ESPERANZA MINE, EL ORO, MEXICO. By W E. Hindry. Min & Sci Press, vol. 99, p. 822. 7 columns I

METHOD OF DEVELOPMENT AT THE ESPERANZA MINE, MEXICO. Min. & Sci Press, vol. 99, p. 846. 1 column

A MINING PUZZLE: Exploration at Broken Hill, NEW SOUTH WALES. By N. Dudley. T. Au. I. M. E., vol. 2, p. 111. 3 pages.

See also MINE MAPS, and METHODS OF MINING, GENERAL AND MISCELLANEOUS.

See also COST OF DEVELOPMENT.

Shaft Sinking: Processes, Applications, Rate of Sinking, Raises, Winzes, Etc.

MODERN SHAFT SINKING. By F Donaldson M. & M., vol. 29, p. 392, $3\frac{1}{2}$ columns; p. 459, 10 columns, I, p. 515, $7\frac{1}{2}$ columns, I; p. 563, $6\frac{1}{2}$ columns, I; vol. 30, p. 124, $9\frac{1}{2}$ columns, I; p. 218, $5\frac{1}{2}$ columns, I; p. 332, $5\frac{1}{2}$ columns, I; p. 404, $5\frac{1}{2}$ columns, I; p. 632, $5\frac{1}{2}$ columns, I.

SHAFT SINKING. By C K. Colvin. Min. & Sci. Press, vol. 85, p. 191. 2 columns

IMPROVED SHAFT SINKING METHODS AT DUCKTOWN. By W. Y. Westervelt. E. & M J., vol. 89, p. 275. $3\frac{1}{2}$ columns I

NOTES ON VERTICAL SHAFT SINKING ON THE WITWATERSRAND. By H. F. Roche. P C. M & M. Soc. S. A., vol. 5, p. 200, 8 columns, I; p. 259, $7\frac{1}{2}$ columns; p. 312, $3\frac{1}{2}$ columns; vol. 6, p. 17, 3 columns.

SINKING THE WOODWARD No. 3 SHAFT. By R. V. Norris E. & M J, vol. 89, p. 1182 $12\frac{1}{2}$ columns. I

THE GIROUX SHAFT AT KIMBERLY, NEVADA. By C E Arnold. E & M J, vol. 89, p. 1325 5 columns. I.

SHAFT SINKING AT THE GIROUX, ELY, NEVADA. Min. & Sci Press, vol. 100, p. 826 $1\frac{1}{2}$ columns.

THE SINKING AND EQUIPMENT OF THE LITTLETON COLLIERIES. By T H. Bailey T. I. M E, vol. 39, p. 418. 38 pages. I.

SINKING INTO THE LOWER COAL-MEASURE AT HULTON COLLIERY. By A J Tonge T I M. E., vol. 39, p. 350. $12\frac{1}{2}$ pages. I.

THE SINKING OF THE ASTLEY GREEN SHAFTS, AT ASTLEY, NEAR MANCHESTER, BY MEANS OF THE DROP-SHAFT METHOD AND UNDERHANGING TUBBING. By C. Pilkington and P. L. Wood. T. I. M. E., vol. 39, p. 529. 25 pages. I.

- SHAFT SINKING AT STELLA MINE, NEW YORK.** E. & M. J., vol. 88, p. 617. 2 columns. I.
- SINKING THE JOHN SHAFT AT HAMSTERLEY COLLIERY, THROUGH SAND AND GRAVEL, BY MEANS OF UNDERGROUND TUBBING** By J. Cummins. T. I. M. E., vol. 38, p. 320. 13 pages. I
- SINKING THE CLONAN SHAFT AT MINEVILLE, NEW YORK.** By G. C. Stoltz. E. & M. J., vol. 85, p. 111. 4 columns I.
- SINKING A FIVE-COMPARTMENT SHAFT ON THE RAND.** By E. M. Weston. E. & M. J., vol. 85, p. 391. 15 columns. I
- SINKING OPERATIONS AT WELLESLEY NEW FITTING, WEMYSS COLLIERIES.** By G. D. Budge and P. Dunsire. T. I. M. E., vol. 36, p. 318. 6½ pages I.
- SINKING AND TIMBERING OF THE ALLAN SHAFTS, NEAR STELLARTON, NOVA SCOTIA.** By H. E. Coll. J. M. Soc. N. S., vol. 12, p. 12. 12 pages I
- SHAFT SINKING AT QUINCY MINE, MICHIGAN.** J. C. M. I., vol. 10, p. 401. 1 page. I.
- SINKING THROUGH BAD GROUND.** By F. W. Adgate. Min. & Sci. Press, vol. 95, p. 183. 4½ columns. I
- SHAFT SINKING IN SOFT GROUND BY FORE-POLING.** M. & M., vol. 29, p. 515. 2 columns. I.
- SHAFT SINKING THROUGH FAULTED GROUND.** E. & M. J., vol. 87, p. 215. 1½ columns.
- SHAFT SINKING IN DANGEROUS GROUND.** Min. Mag., London, vol. 2, p. 293. 2 columns: I
- SINKING A WET SHAFT AT TOMBSTONE.** By E. W. Walker. Min. & Sci. Press, vol. 98, p. 284. 3 columns. I.
- SINKING THROUGH SAND AT NEW-BIGGIN COLLIERY** By E. M. Bainbridge and W. M. Redfeam. T. I. M. E., vol. 38, p. 577. 16 pages. I.
- SHAFT SINKING IN QUICKSAND AND BOULDERS** By G. W. Stuart. J. M. Soc. N. S., vol. 11, p. 69. 5½ pages.
- SHAFT SINKING BY CEMENTATION.** By L. Morin. E. & M. J., vol. 86, p. 221. 6 columns I.
- See also **SHAFT LINING.**
- PUDDLING A WET SHAFT.** By H. Bour-sin. Min. & Sci. Press, vol. 96, p. 127. 2½ columns I.
- SINKING A SHAFT WITH DROP-SHAFT AND AIR-LOCK.** Sch. Mines Quart., vol. 31, p. 219. 5 pages. I.
- THE DROP-SHAFT METHOD OF SINKING.** E. & M. J., vol. 90, p. 918. 4½ columns. I.
- SHAFT SINKING BY CAISSONS OR DROP-SHAFTS.** M. & M., vol. 29, p. 517. 3½ columns. I.
- SPECIAL METHODS OF SHAFT SINKING.** P. C. M. & M. Soc. S. A., vol. 8, p. 64. 2½ columns.
- DRIVING A LONG VERTICAL RAISE.** By C. T. Kriebel. M. & M., vol. 30, p. 282. 2 columns. I.
- SINKING A WINZE WITH LONG HOLES.** By G. C. McFarlane. E. & M. J., vol. 86, p. 713. 1½ columns. I.
- LONG-HOLE SYSTEM OF SHAFT SINKING.** E. & M. J., vol. 85, p. 659. ½ column.
- See also **USE OF BORE HOLES, DIAMOND AND ROTARY DRILLS, and CHURN DRILLS.**
- THE USE OF THE CHANNELING MACHINE IN MINING OPERATIONS: A Proposed Method.** Min. & Sci. Press, vol. 101, p. 707. 5 columns. I.
- DRIVING VERTICAL RAISES WITH STOPPING DRILLS** By A. O. Christensen. E. & M. J., vol. 88, p. 937. 2½ columns I.
- DRIVING INCLINED RAISES WITH STOPPING DRILLS** By A. O. Christensen. E. & M. J., vol. 88, p. 618. 2 columns I.

DRIVING A SLOPE IN NEWFOUNDLAND
M & M., vol. 31, p 569 7 col-
umns I

BORING LARGE SHAFTS. Min & Sci.
Press, vol 20, p 257, 2 columns, I ;
p. 272, 1½ columns, I

THE KIND-CHAUDRON BORING PROCESS
FOR SHAFT SINKING M & M.,
vol. 30, p. 332 5½ columns. I.

SINKING BY MEANS OF UNDERHANGING
TUBBING E. & M. J., vol 89, p.
878. 4½ columns. I.

See also SHAFT LINING

SHAFT SINKING BY FREEZING PROCESS.
By S. F. Walker. M. & M., vol. 30,
p 41. 7½ columns.

EXTENSION OF A COLLIERY WORKING
SHAFT By M. S. Hachita E. & M.
J., vol. 90, p. 1168. 6½ columns. I

DRILLING IN SHAFT SINKING ON THE
RAND. E. & M. J, vol 85, p 393.
1 column.

See also DRILLING AND BORING.

THE SINKING OF CIRCULAR SHAFTS.
By Robert Steven T. I. M. E.,
vol 38, p. 22. 6 pages. I.

See also DEVELOPMENT Size, Shape,
etc., of Shafts.

NOTE ON A PROBLEM DURING SHAFT
SINKING. By C. B. Saner. P. C
M. & M. Soc. S A, vol 9, p. 70,
8 columns, I ; p. 303, 4½ columns, I.

RATE OF SHAFT SINKING ON THE RAND.
T Au. I. M. E., vol. 5, p. 49. 6
pages.

RAPID SHAFT SINKING IN BUTTE By
C. J. Stone. E & M. J, vol 90,
p 107. 2 columns.

RECORD OF SHAFT SINKING AT NO. 1
SKY LINE MINE. Min. & Sci Press,
vol. 88, p. 40. Table.

NEW SHAFT SINKING RECORD AT COR-
BIN, MONTANA By F. J Tuck.
Min. & Sci. Press, vol. 101, p 406.
1½ columns.

RECORD SHAFT SINKING, SOUTH AFRI-
CA. Min. & Sci. Press, vol. 95,
p. 438. ½ column.

SKIPS OR BUCKETS IN SINKING VER-
TICAL SHAFTS By C. B. Saner.
E. & M J., vol 87, p. 644. 7 col-
umns

See also HOISTING BUCKETS, and SKIPS
FOR RAISING MINERAL.

VERTICAL CURVES IN SHAFTS. By S.
Smilie. E. & M. J, vol 90, p. 1000.
5 columns. I

SPECIFICATIONS FOR SINKING AND LIN-
ING SHAFTS M. & M, vol. 29,
p. 463. 1½ columns

ARRANGEMENT OF HOLES IN SHAFT
SINKING IN BENDIGO. T. Au. I. M.
E, vol. 8, pt 2, p 197. 5 pages I.

ARRANGEMENT OF HOLES IN SHAFT
SINKING ON THE RAND. E. & M. J,
vol 85, p 395. Tables I

ARRANGEMENT OF HOLES IN SHAFT
SINKING, ALLAN SHAFTS, NOVA
SCOTIA. J. M Soc. N. S, vol. 12,
p 22. I.

See also ARRANGEMENT OF HOLES IN
BLASTING

See also USE OF CONCRETE IN MINES.

See also DRAINAGE IN GENERAL and
PUMPS FOR MINE USE

See also ROPES, CHAINS, COUPLINGS,
ETC., and DEVELOPMENT.

Methods of Mining Coal, Lignite, Etc.

THE MINING OF COAL: Pits and Gal-
leries in General. Min Mag, vol 8,
p 163, 2 pages; vol 7, p. 73, 4 pages;
p 258, 7½ pages; p. 463, 7½ pages.

THE VARIOUS MODES IN WHICH COAL
IS WORKED IN ENGLAND, AND AN
EXAMINATION OF THE PRACTICE IN
DIFFERENT DISTRICTS By J K.
Blackwell Min. Mag., vol 1, p.
559, 12 pages; p. 3, 10 pages.

GENERAL REMARKS AND RULES ON
THE WORKING AND WINNING OF
COAL Min. Mag, vol 4, p. 135,
7 pages; p. 337, 6 pages.

- SOME REMARKS ON COAL MINING. By J Marlor Min Mag, vol. 5, p 415, 4 pages, p 458, 10½ pages, vol. 6, p 27, 13½ pages; p. 107, 10 pages; p 213, 12½ pages; p 323, 10 pages
- COAL MINING IN ALABAMA By H. M Payne. E. & M J, vol. 89, p. 1163. 1½ columns
- COAL AND COAL MINING IN NEW SOUTH WALES By T. Parton T. Au I M. E, vol. 10, p. 233 27½ pages
- MINING METHODS AT SEATON-DELAVAL COLLIERY, ENGLAND By L. W. Mayer. E. & M. J, vol 86, p 765. 13 columns I.
- COAL MINING IN NORTHUMBERLAND, ENGLAND. By G R. Dixon. E & M. J., vol 85, p. 212. 8 columns I.
- METHODS OF WORKING IN THE NORTH-UMBERLAND COAL MINES E & M. J, vol 85, p 212 3 columns
- COAL MINING BY THE BORD-AND-PILLAR SYSTEM, NORTHUMBERLAND, ENGLAND By G R Dixon. E & M. J., vol. 85, p. 411 12½ columns. I.
- See also ROOM AND PILLAR MINING.
- SPECIAL METHOD FOR MINING COAL IN ENGLAND. By G R Dixon E. & M. J, vol. 85, p 1203. 7 columns. I.
- SOUTH STAFFORDSHIRE METHOD OF MINING COAL. By L W. Mayer E. & M. J., vol. 86, p. 673. 10 columns. I.
- OPERATION OF CARMAUX COAL MINES IN FRANCE. By L W Mayer. E & M. J., vol. 86, p 574 16 columns. I.
- ADVANCED METHODS OF MINING COAL IN SILESIA. By L. W. Mayer. E. & M J, vol 86, p 887. 17 columns. I.
- THE TWO-ENTRY METHOD OF MINING IN SOUTHERN INDIANA. E. & M J., vol 90, p. 870 4 columns I.
- See also DEVELOPMENT, ETC.
- COAL MINING METHODS IN RANDOLPH COUNTY, MISSOURI By J J Rutledge E & M J, vol 86, p 6. 6½ columns. I.
- METHODS OF MINING COAL IN NEW ZEALAND By S. Fry E & M J, vol. 87, p. 753. 9½ columns. I
- MINING METHODS IN THE PITTSBURG SEAM E & M. J., vol 90, p 521. 10 columns. I.
- SUGGESTED MINING METHOD FOR PITTSBURG SEAM By R Y Williams E. & M. J, vol 86, p 330 7½ columns I
- POCAHONTAS REGION MINING METHODS By H H. Stoek. M & M, vol 29, p. 394. 13 columns. I
- METHODS OF MINING IN THE POCAHONTAS REGION M. & M, vol. 29, p. 398 4 columns. I.
- COAL MINING METHODS IN SIBERIA. E & M. J, vol 89, p. 625 3½ columns.
- COAL MINING AT DANTE, VIRGINIA. By R W. Stone. U S G. S, Bull 316, p. 68. 8 pages I 1906.
- METHOD OF MINING COAL IN WASHINGTON M & M, vol. 30, p. 17. ½ column. I.
- METHODS OF MINING COAL IN WEST VIRGINIA. M. & M., vol. 29, p 509. 11½ columns. I.
- COAL MINING AT MORGANTOWN, WEST VIRGINIA. By R. B Brimsmade. E & M. J, vol. 89, p. 1236. 5 columns.
- COAL MINING METHODS AT GARY, WEST VIRGINIA. By J. S Walker. E & M. J., vol. 88, p. 6. 10½ columns I.
- SYSTEMS OF MINING IN THE DIAMOND-VILLE COAL FIELD, WYOMING E. & M. J., vol. 85, p. 116. 1½ columns.
- METHOD OF WORKING THE GEORGE'S CREEK "BIG VEIN": Old and New. E. & M. J., vol. 87, p. 307. 6 columns. I.
- PLANS FOR MINING A FLAT COAL SEAM. By A. H. Stow E & M. J. vol. 85, p. 504. 9½ columns. I.

MINING IN FLAT COAL SEAMS UNDER HEAVY COVER. By A. H. Stow. E & M. J., vol 86, p. 135. 11½ columns. I.

METHOD OF MINING TWO SEAMS OF COAL WITH AN INTERVENING PARTING OF SHALE 6 TO 10 FEET THICK. M. & M., vol 29, p. 46. 1 column. I.

GETTING TOP (ROOSTER) COAL. E & M. J., vol 86, p. 15. ¾ column.

THE BLOCK SYSTEM OF COAL MINING IN ENGLAND. E & M. J., vol 85, p. 1203. 2½ columns. I.

WORKING A COAL SEAM OF MODERATE THICKNESS. By G. R. Dixon. E. & M. J., vol 85, p. 1247. 6½ columns. I.

WORKING TWO COAL SEAMS IN CLOSE PROXIMITY. By W. F. White. E & M. J., vol 87, p. 756. 2½ columns. I.

A METHOD OF WORKING A THICK COAL SEAM. By G. Poole. E & M. J., vol 86, p. 15. 5½ columns. I.

NOTES ON WORKING THE THICK COAL OF SOUTH STAFFORDSHIRE AND WARWICKSHIRE. By L. Holland. T. I. M. E., vol. 37, p. 46. 6½ pages. I.

HORIZONTAL-SLICE METHOD OF MINING THICK COAL SEAMS, ST. ÉTIENNE. T. I. M. E., vol 36, p. 408. 12 pages. I.

MINING A 20-FOOT SEAM AT CARMAUX, FRANCE. E. & M. J., vol 86, p. 578. 2 columns.

See also MINING THICK AND MASSIVE DEPOSITS.

METHOD OF WORKING A STEEP COAL SEAM. By A. Y. Hay. E & M. J., vol. 89, p. 1331. 8 columns. I.

WORKING A STEEP COAL SEAM. By A. Y. Hay. M. & M., vol 31, p. 77. 4½ columns. I.

COAL MINING IN A VERTICAL SEAM. By H. M. Payne. E. & M. J., vol. 90, p. 469. 1½ columns. I.

THE WORKING OF THE INCLINED SEAMS, IN THE ST. ÉTIENNE COAL FIELD, AT THE MONTRAM-BERT AND

LA BÉRANDERE COULIERIES. By H. C. Annett. T. I. M. E., vol. 36, p. 394. 30½ pages. I.

THE CHUTE-BREAST SYSTEM OF MINING IN WASHINGTON. M. & M., vol 30, p. 313. ¼ column. I.

PITCH MINING IN THE HAZLETON DISTRICT. By D. S. Wolfe. Coal Mining Supplement, E & M. J., vol 88, p. 25. 5½ columns. I.

METHODS OF MINING LIGNITE IN ITALY. By C. R. King. E & M. J., vol 89, p. 1176. 17½ columns. I.

METHOD OF MINING GILSONITE: Use of a Steam Jet. E & M. J., vol 89, p. 1115. ¾ column. I.

See also MINE MAPS.

See also ROOM-AND-PILLAR MINING, and LONGWALL MINING.

Room-and-Pillar Mining

A ROOM-AND-PILLAR METHOD. By A. E. Robinson. M. & M., vol 31, p. 88. ¼ column. I.

ROOM-AND-PILLAR MINING IN THE GREAT FALLS COAL FIELD, MONTANA. E & M. J., vol 87, p. 588. ¾ column. I.

COAL MINING ON THE RETREATING SYSTEM. By H. J. Nelms. E. & M. J., vol. 86, p. 1251. 2½ columns. I.

COAL MINING BY THE RETREATING ROOM-AND-PILLAR SYSTEM. By H. J. Nelms. E & M. J., vol. 86, p. 17. 4 columns. I.

ROOM-AND-PILLAR METHOD OF WORKING COAL, GARY, WEST VIRGINIA. E & M. J., vol. 88, p. 9. Map.

ADVANCE AND RETREAT ROOM-AND-PILLAR SYSTEM. By H. J. Nelms. E & M. J., vol 89, p. 879. 2½ columns. I.

METHODS OF MINING ROOM COAL IN WEST VIRGINIA. M. & M., vol 29, p. 511. ¼ column. I.

METHOD OF WORKING THE HOSMER COAL MINES. Room-and-Pillar. J. C. M. I., vol. 13, p. 243. I.

COAL MINING AT KAYLOB, PENNSYLVANIA By E. K. Judd. E. & M. J., vol. 88, p. 453. 1½ columns. I.

LIGNITE COAL MINING IN BOHEMIA: Room-and-Pillar Method. By W. S. Hall. M. & M., vol. 29, p. 253. 4½ columns. I.

MINING OF BORAX IN AMERICA: Room-and-Pillar Method E. & M. J., vol. 88, p. 827. 1 column.

MICA MINING. By A. S. Atkinson. E. & M. J., vol. 87, p. 941. 3½ columns.

See also **METHODS OF MINING COAL**, and first volume of **INDEX**.

Longwall Mining

ON THE WORKING OF THIN SEAMS OF COAL, WITH OBSERVATIONS ON LONGWALL AND BORD-AND-PILLAR WORK. By C. C. Greenwell. Min. Mag., vol. 9, p. 413, 6 pages, p. 494, 12½ pages.

LONGWALL IN INCLINED SEAMS. By J. G. MacKenzie. M. & M., vol. 29, p. 491. 3½ columns. I.

INFLUENCE OF CLEAT IN LONGWALL MINING. E. & M. J., vol. 85, p. 213. 1½ columns.

See also **GEOLOGIC PROGRESS AND STUDIES**.

PANEL LONGWALL MINING. E. & M. J., vol. 85, p. 894. 1½ columns.

See also **PANEL MINING**.

AMERICAN LONGWALL MINING METHODS. By H. M. Payne. E. & M. J., vol. 90, p. 1020. 8 columns. Maps.

LONGWALL METHODS OF MINING A COAL SEAM. By L. W. Mayer. E. & M. J., vol. 86, p. 19. 13 columns. I.

LONGWALL ADVANCING IN ANTHRACITE MINING IN PENNSYLVANIA. M. & M., vol. 29, p. 40. 1 column. I.

THE LONGWALL MINES OF ILLINOIS. By W. F. Pellier. E. & M. J., vol. 89, p. 380. 5 columns. I.

THE LONGWALL METHOD OF WORKING IN ENGLAND. By Geo. R. Dixon. E. & M. J., vol. 85, p. 1145. 11½ columns. I.

LONGWALL ADVANCING IN THE ST. ÉTIENNE COAL MINES. T. I. M. E., vol. 36, p. 406. 2 pages. I.

LONGWALL MINING IN CARMAUX, FRANCE E. & M. J., vol. 86, p. 576. 4 columns. I.

LONGWALL MINING AT SEATON-DE-LAVAL COLLIERY, ENGLAND E. & M. J., vol. 86, p. 765. 8 columns. I.

LONGWALL METHOD IN ENGLAND. E. & M. J., vol. 86, p. 964. 3 columns. I.

LONGWALL MINING IN THE KANSAS STATE MINE E. & M. J., vol. 89, p. 1159. 9 columns. I. Map.

THE LONGWALL METHOD OF MINING EMPLOYED IN THE FROZEN GRAVELS OF THE NORTH Min. & Sci. Press, vol. 98, p. 382. 8 columns. I.

See also **MINING FROZEN GRAVELS, METHODS OF MINING COAL AND COST OF COAL MINING**.

Panel Mining

MINING COAL WITH THE PANEL SYSTEM. By A. H. Stow. E. & M. J., vol. 85, p. 892. 10½ columns. I.

See also **LONGWALL MINING**, first volume of **INDEX**, and **COST OF COAL MINING**.

Drawing Pillars in Coal Mines

PILLAR DRAWING. By J. Jenkins. M. & M., vol. 30, p. 151. 4 columns. I.

DRAWING PILLARS IN COAL MINING. M. & M., vol. 31, p. 415. ½ column. I.

METHODS OF REMOVING COAL PILLARS. By F. W. Cunningham. M. & M., vol. 31, p. 495. 8 columns. I.

DRAWING OF PILLARS IN THE PITTSBURG SEAM E. & M. J., vol. 90, p. 521. 10 columns. I.

METHOD OF ROBBING PILLARS IN THE POCAHONTAS REGION M & M., vol 29, p 399. 1 column. I.

PILLAR DRAWING IN THE CONNELLSVILLE REGION T A I. M E., vol. 41, p. 229. 10 pages. I.

ROBBING PILLARS IN THE PITCHING COAL SEAMS, HAZLETON DISTRICT. Coal Mining Supplement, E. & M. J., vol 88, p. 27. $\frac{1}{2}$ column.

RECOVERING ABANDONED COAL PILLARS. By W. L. Hamilton. E. & M. J., vol. 88, p. 22. 6 columns. I.

WORKING THE WALLS OR DRAWING PILLARS IN COAL MINING BY LONGWALL. M. & M., vol. 29, p 492 1 column.

ROBBING PILLARS AT THE SEATON-DELAVAL COLLIERY, ENGLAND. E. & M J, vol. 86, p 768 1 column. I

ROBBING PILLARS IN THE NORTHUMBERLAND MINES, ENGLAND E. & M J., vol. 85, p. 411. 1 column.

ROBBING PILLARS IN ENGLISH COAL MINING. E. & M. J., vol 85, p. 1247. 2 columns. I.

RECOVERING ORE FROM PILLARS E. & M. J, vol 89, p. 699. $\frac{1}{2}$ column.

See also CONSERVATION, METHODS OF MINING COAL and COST OF COAL MINING.

Breaking Down Coal at the Face

METHODS OF UNDERCUTTING COAL. E & M J, vol. 89, p. 622. 2 $\frac{1}{2}$ columns.

METHOD OF UNDERCUTTING IN THE WIND ROCK COAL MINE, TENNESSEE. M. & M., vol 31, p. 66 1 column.

WORKING THE BREASTS IN THE PITCHING SEAMS, HAZLETON DISTRICT. Coal Mining Supplement, E & M. J., vol. 88, p. 27. $\frac{1}{2}$ column. I.

BREAKING DOWN COAL AT THE FACE IN WEST VIRGINIA At Thomas. M & M., vol 30, p. 204. I.

METHOD OF WORKING ROOMS IN COAL-TON MINE, WEST VIRGINIA. M & M., vol. 30, p. 190 $\frac{1}{2}$ column. I.

WORKING AT THE FACE IN THE LIGNITE MINES OF ITALY E. & M. J., vol. 89, p. 1177. 2 columns. I.

See also MINING MACHINES AT THE FACE, ELECTRIC COAL MINING MACHINES, MECHANICAL MINING APPLIANCES and COST OF COAL MINING.

Rooms and Entries: Dimensions, Etc.

See first volume of INDEX, and COST OF TUNNELING.

Methods of Mining: General and Miscellaneous

MINING METHODS AND COSTS AT THE ESPERANZA MINE, MEXICO. By W. E. Hindry. Min. & Sci Press, vol. 99, p. 846. 6 columns. I.

METHOD OF MINING BARITE IN MISSOURI T. A. I M E, vol 40, p 728 6 $\frac{1}{2}$ pages. I.

CLAY MINING AND ITS RELATION TO COAL MINING. By R R Hice. E. & M. J., vol 88, p 105. 7 $\frac{1}{2}$ columns

METHODS OF MINING AND HANDLING ORE IN BUTTE By E. Higgins. E. & M. J., vol. 85, p. 97. 8 columns. I.

See also METHODS OF HANDLING MINERAL AND COAL.

MINING METHODS EMPLOYED AT CANANEA, MEXICO. By M J Elsing. E. & M. J, vol 90, p. 914, 9 $\frac{1}{2}$ columns, I.; p. 963, 10 $\frac{1}{2}$ columns, I.

MINING METHODS IN THE CLIFTON-MORENCI DISTRICT, ARIZONA. Min. & Sci. Press, vol 101, p. 831. 12 columns. I.

MICHIGAN COPPER MINING METHODS. By L. Fraser. Min & Sci. Press, vol. 96, p. 847. 6 $\frac{1}{2}$ columns I

WORK AND METHODS AT THE YELTA COPPER MINE, SOUTH AUSTRALIA.

- By L. G. Hancock T. Au. I. M. E., vol. 11, p. 97. 7 pages.
- UNDERGROUND MINING METHODS AT THE QUINCY COPPER MINE, MICHIGAN. By G. R. McLaren. J. C. M. I., vol. 10, p. 399. 18½ pages. I.
- METHODS OF MINING IRON ORE AT SUNRISE, WYOMING. By B. W. Vallat. E. & M. J., vol. 85, p. 399. 9½ columns. I.
- MINING ON THE GOGEBIC RANGE. By P. S. Williams. M. & M., vol. 31, p. 712. 4½ columns. I.
- METHOD OF MINING AT THE NORTH STAR MINES, GRASS VALLEY, CALIFORNIA. E. & M. J., vol. 87, p. 397. 2 columns. I.
- COAL MINING METHODS IN GOLD MINES. E. & M. J., vol. 90, p. 1043. 1½ columns.
- See also METHODS OF MINING COAL
- THE MEXICAN METHOD OF MINING. E. & M. J., vol. 86, p. 311. 1½ columns.
- NEW MINING AND MILLING PRACTICE ON THE RAND. By E. M. Weston. E. & M. J., vol. 86, p. 323. 5 columns.
- MINING AT THE REDJANG-LEBONG GOLD-SILVER MINE, SUMATRA. By H. Philp. P. C. M. & M. Soc. S. A., vol. 10, p. 315. 6½ columns.
- THE PILGRIMS REST GOLD FIELDS AND MINING METHODS. By J. Moyle-Phillips. P. C. M. & M. Soc. S. A., vol. 16. 3½ columns.
- MINING PRACTICE AT KALGOORLIE, WEST AUSTRALIA. By G. W. Williams. E. & M. J., vol. 85, p. 193. 8½ columns. I.
- METHOD OF MINING AT THE HELEN MINE, MICHIGIOTON, ONTARIO. J. C. M. I., vol. 13, p. 123. 4 pages. I.
- NOTES ON PRACTICAL MINING IN BENDIGO. By L. A. Samuels. T. Au. I. M. E., vol. 8, pt. 2, p. 192. 12 pages. I.
- SOME NOTES ON THE MINING PRACTICE OF THE WITWATERSRAND GOLD FIELDS, SOUTH AFRICAN REPUBLIC. By G. A. Denny. T. Au. I. M. E., vol. 5, p. 8. 62 pages. I.
- MINING METHODS AT KALGOORLIE, WEST AUSTRALIA MINES. E. & M. J., vol. 85, p. 196. 1 column.
- MINING AT THE PROMONTORIO SILVER MINE, DURANGO, MEXICO. T. A. I. M. E., vol. 38, p. 747. 2 pages.
- METHODS OF DEEP LEAD MINING. P. C. M. & M. Soc. S. A., vol. 10, p. 377. 2½ columns.
- METHOD OF MINING THE DEEP LEAD IN AUSTRALIA. By D. H. Browne. Min. & Sci. Press, vol. 97, p. 568. 2 columns.
- See also AUSTRALIA, OCCURRENCE OF GOLD, and AURIFEROUS GRAVELS.
- PRACTICAL HINTS ON DEEP ALLUVIAL MINING. By D. H. Browne. T. Au. I. M. E., vol. 7, p. 61. 10 pages.
- THE STULL-SET METHOD OF MINING AT THE HECLA MINE, IDAHO. E. & M. J., vol. 89, p. 312. 1 column.
- SQUARE-SET MINING, MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 749. 1 column. I.
- SQUARE-SET SYSTEM IN THE NEW SOUTH WALES MINES. T. Au. I. M. E., vol. 9, p. 119. 4½ pages. I.
- See also SQUARE-SET TIMBERING
- MINING AND STOPING METHODS IN THE CŒUR D'ALENE. By J. Tysowski. E. & M. J., vol. 90, p. 452. 8½ columns. I.
- MINING METHOD IN THE CŒUR D'ALENE REGION. Min. & Sci. Press, vol. 96, p. 622. 4 columns. I.
- GRANBY MINING METHODS. By C. M. Campbell. J. C. M. I., vol. 11, p. 392. 12 pages. I.
- METHODS OF MINING IN THE GRANBY ORE BODIES. By C. M. Campbell. E. & M. J., vol. 87, p. 252. 13½ columns. I.

DEPARTURE IN SHEET-ORE MINING IN THE JOPLIN DISTRICT. By T Chapman E & M J, vol. 87, p. 942 1 column. I.

METHOD OF MINING EMPLOYED IN THE LEAD MINES OF MECHERNICH, PRUSSIA. E & M J, vol 86, p 169. 9½ columns I

METHODS OF WORKING THE NITER DEPOSITS OF CHILE E. & M. J., vol 80, p. 20 3 columns. I

THE WORKING OF OIL-SHALE AT PUMPHERSTON, SCOTLAND By W. Caldwell T I M E, vol. 36, p 581 9½ pages. I

MINING METHODS IN THE NORTH By T A. Rickard Min. & Sci. Press, vol 97, p. 810, 8 columns, I; vol 98, p 86, 8 columns, I; p. 382, 8 columns, I; p. 587, 10 columns, I.

DRY-WALL MINING AT PANAGUN, BRAZIL Min Mag, London, vol 3, p 379. 1½ columns. I

A REVOLUTION IN MINING METHODS. By G. E. Walcott Min. & Sci. Press, vol. 101, p 707 6 columns I

A METHOD OF MINING IN HEAVY GROUND By W L Fleming E & M. J, vol 88, p. 375 3½ columns I

THE PANEL SYSTEM AS APPLIED TO METAL MINING By H E West E & M. J, vol 87, p. 1177 8 columns I.

See also ROOM AND PILLAR MINING, and METHODS OF COAL MINING

RALEIGH COUNTY MINING METHODS, WEST VIRGINIA. By H. H. Stoek M & M, vol. 29, p 471. 10 columns. I.

See also MINE MAPS, METHODS OF STOPING IN MINES, and COSTS OF MINING

Mining Thick and Massive Deposits

THE MILLING METHOD OF MINING AS EMPLOYED AT THE HELEN IRON MINE. J. C. M I., vol. 13, p. 123. 4 pages I.

MINING THE TREADWELL LODE. By T A. Rickard. Min & Sci Press, vol. 97, p 85 7½ columns I.

See also METHODS OF STOPING

METHODS OF MINING EMPLOYED AT THE CREIGHTON MINE, SUDBURY, CANADA J C M I, vol. 11, p 574. 6 pages I.

See also PACKING MINE WORKINGS, ETC.

METHOD OF MINING AT THE DE BEERS DIAMOND MINES. P C M & M. Soc. S. A., vol. 7, p 228. ½ column.

See also MINING THICK AND MASSIVE DEPOSITS, and METHODS OF STOPING

See also SALT MAKING, and first volume of INDEX

The Caving Systems of Mining

THE DOME OF EQUILIBRIUM AND THE CAVING SYSTEM OF MINING By C. T. Rice. Min. & Sci. Press, vol 95, p. 85. 2½ columns

THE CAVING SYSTEM AT THE DARLEN MINE, PANAMA By A B Chase Min & Sci. Press, vol 95, p. 238 1½ columns. I.

THE CAVING METHOD AS EMPLOYED AT THE CONSOLIDATED MERCUR MINES. E & M J, vol 89, p. 1273. 13 columns. I.

CANANEA CAVING AND SLICING SYSTEMS. By R L Herrick M & M, vol. 30, p 23. 13½ columns. I

TOP-SLICING MINING METHODS AT CANANEA, MEXICO. By C. De Kalb. Min & Sci Press, vol. 101, p. 230. 2½ columns. I.

THE TOP-SLICE SYSTEM AT CANANEA. M. & M, vol 30, p. 23. 13 columns. I.

THE SLICING SYSTEM AT CANANEA, MEXICO. A Caving Method. E. & M. J, vol 90, p 915. 1½ columns. I.

THE CAVING SYSTEM AT CANANEA: Caving Pillars. E & M. J., vol. 90, p. 963. 4 columns. I.

CAVING METHODS IN THE ARIZONA COPPER MINES: Top-Slice and Sub-Drift Methods. Min. & Sci. Press, vol. 99, p. 392 1½ columns. I.

THE MITCHELL SLICING SYSTEM AT BISBEE, ARIZONA By M. J. Elsing. E. & M. J., vol. 90, p. 174. 6 columns. I.

THE MITCHELL SLICING SYSTEM AT BISBEE, ARIZONA. E. & M. J., vol. 90, p. 1291 2½ columns

THE TOP-SLICE SYSTEM AT METCALF, ARIZONA E. & M. J., vol. 90, p. 120. ½ column. I.

BLOCK-CAVING AT THE CLIFTON-MORENCI MINES. Min. & Sci. Press, vol. 101, p. 835. 1 column. I

THE CAVING SYSTEM OF MINING EMPLOYED AT MIAMI, ARIZONA M & M., vol. 30, p. 755 4 columns I.

THE CAVING METHOD EMPLOYED AT MIAMI, ARIZONA. M. & M., vol. 30, p. 83. 1 column. I.

METHOD OF MINING AT MIAMI, ARIZONA: Top-Slice and Sub-Drift Caving Systems Min. & Sci. Press, vol. 99, p. 657 3 columns. I

THE CAVING METHOD AS EMPLOYED IN THE GLOBE-KELVIN DISTRICT, ARIZONA. E. & M. J., vol. 89, p. 813. 2 columns. I.

CAVING AT BINGHAM CANYON, UTAH. Min. & Sci. Press, vol. 98, p. 520, 3 columns, I.; p. 555, 3 columns, I.

THE CAVING SYSTEM OF MINING AT ELY, NEVADA. M. & M., vol. 29, p. 25, ½ column; p. 83, ½ column.

IRON MINING IN MINNESOTA By E. K. Soper. Min. & Sci. Press, vol. 101, p. 767. 5½ columns. I

MARQUETTE RANGE CAVING METHOD By H. H. Stoeck. M. & M., vol. 30, p. 193. 14½ columns. I.

NOTES ON CAVING SYSTEM IN NORTHERN IRON MINES Sub-drift Method By A. H. Fay E. & M. J., vol. 88, p. 961. 9 columns. I.

CHANGE OF METHOD IN MINING SOFT ORE. By S. R. Elliott. Min. & Sci. Press, vol. 99, p. 97 4 columns I.

THE TOP-SLICE METHOD IN THE GOGEBIC RANGE. M. & M., vol. 31, p. 712 4½ columns I.

UNDERGROUND METHODS OF MINING USED ON THE GOGEBIC RANGE. By P. S. Williams T. L. S. M. I., vol. 15, p. 179 16 pages. I.

See also METHODS OF MINING: GENERAL AND MISCELLANEOUS, and MINING THICK AND MASSIVE DEPOSITS, also COST OF METAL MINING.

Pocket Mining

O'HARA POCKET MINE, TUOLUMNE COUNTY, CALIFORNIA Min. & Sci. Press, vol. 96, p. 782. 1½ columns

See also first volume of INDEX

Drift Mining

See first volume of INDEX, and COST OF METAL MINING

Methods of Stopping in Mines

NOTES ON DIFFERENT METHODS OF STOPPING. P. C. M. & M. Soc. S. A., vol. 10, p. 301. 1½ columns.

STOPPING IN HEAVY GROUND E. & M. J., vol. 88, p. 375. ½ column I.

STOPPING IN THE SLICING SYSTEM. E. & M. J., vol. 89, p. 1053. ½ column. See also THE CAVING SYSTEM OF MINING.

PORTABLE SCAFFOLD FOR MINE USE E. & M. J., vol. 89, p. 404 1 column. I.

METHOD OF WORKING VERTICAL SEAMS OF OIL-SHALE, SCOTLAND. T. I. M. E., vol. 36, p. 587. 2 pages I

DRILLING AND BLASTING IN STOPPING ON THE RAND. P. C. M. & M. Soc. S. A., vol. 9, p. 14 1 column. See also BLASTING IN METAL MINES, and USE OF EXPLOSIVES IN MINING.

STOPING AT THE QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p 405 1½ pages. I.

STOPING METHODS IN MINES OF DUCKTOWN BASIN: Underhand Work. By J. Tyssowski E. & M. J., vol. 89, p 463. 5 columns. I.

STOPING IN THE SUPERIOR AND BOSTON MINE, ARIZONA M & M, vol. 31, p. 112. 4 columns.

METHODS OF STOPING AT THE CLIFTON-MORENCI MINES. Min & Sci. Press, vol 101, p. 831. 3 columns

STOPING WITHOUT TIMBERS AT METCALF, ARIZONA. E & M J, vol 90, p. 119. 2 columns. I.

STOPING AT HOMESTAKE MINE, SOUTH DAKOTA By J Tyssowski. E & M J, vol. 90, p. 74. 7½ columns I

METHOD OF STOPING IN THE TREADWELL MINES Min. & Sci. Press, vol 97, p. 89 2½ columns. I

See also MINING THICK AND MASSIVE DEPOSITS.

STOPING AT THE LOS PILARES MINE, MEXICO. M & M, vol 31, p 108 3 columns. I.

METHODS OF STOPING AT THE NORTH STAR MINES, GRASS VALLEY, CALIFORNIA E. & M J, vol 87, p. 398. ½ column. I.

NOTES ON DIFFERENT METHODS OF STOPING IN USE ON THE KALGOORLIE FIELD. By J Cheffirs. T. Au. I M E., vol. 13, p. 211. 3 pages

STOPING METHODS AT KALGOORLIE By J Cheffirs Min & Sci. Press, vol 100, p. 391. 1½ columns.

METHODS OF STOPING IN USE IN THE KALGOORLIE FIELD By J. Cheffirs. E & M. J., vol 89, p. 357. 2½ columns.

STOPING IN THE MOUNT MORGAN MINE. E. & M. J, vol 87, p. 750 1½ columns.

STOPING IN THE RAND MINES P. C. M. & M. Soc. S. A., vol. 6, p 124 12 columns. I.

STOPING IN THE RAND MINES. P. C. M. & M Soc. S. A., vol 8, p. 257 9 columns I

METHOD OF STOPING IN THE PILGRIM'S REST MINES P. C. M & M Soc. S. A., vol. 9, p. 297. 1 column

STOPING IN THE BARBERTON GOLDFIELD, SOUTH AFRICA All Methods Used P. C M. & M. Soc. S. A., vol. 10, p. 129 2 columns. I.

SILVER-LEAD ORE MINING AND THE VARIOUS SYSTEMS OF STOPING AND TIMBERING EMPLOYED IN BROKEN HILL, NEW SOUTH WALES By E. E. Beaumont T Au I M. E., vol 9, p. 117 26 pages I.

See also METHODS OF TIMBERING.

STOPING METHODS IN THE COEUR D'ALENE DISTRICT E & M J., vol 90, p. 452. 8½ columns I.

STOPING IN THE LEAD MINES OF MECHERNICH, PRUSSIA E & M. J, vol 86, p. 171. 1½ columns.

STOPING METHODS. Lead Mines, Cumberland, England. E. & M. J, vol 85, p. 297 3 columns I

THE METHOD OF BREAST STOPING AT CRIPPLE CREEK By G E Walcott. E & M J, vol 85, p. 102 5 columns I

STOPING WITH SQUARE-SETS AT THE METCALF MINE, ARIZONA E. & M J, vol 90, p 120. 1 column I

See also SQUARE-SET TIMBERING.

UNDERHAND STOPING IN THE IRON MINES OF THE GOGEBIC RANGE. T. L S M I, vol. 15, p. 189 1 page. I.

UNDERHAND STOPING AT THE BURRA BURRA MINE, DUCKTOWN E. & M. J., vol. 86, p. 1230. 1 column.

OVERHAND STOPING IN THE BROKEN HILL MINES. T. Au. I. M. E., vol. 9, p 127. 6 pages. I

OVERHAND STOPING IN SOUTH AFRICA. T. Au I. M. E., vol 5, p 41 2½ pages.

- OVERHAND STOPING AT THE YELTA COPPER MINE, SOUTH AUSTRALIA T. Au I M. E., vol. 11, p. 99. $\frac{1}{2}$ page.
- OVERHAND STOPE OR VERTICALLY STEPPED-FACE METHOD OF MINING COAL T. I M. E., vol. 36, p. 400. 6 pages. I
- OVERHAND AND UNDERHAND STOPING IN LARGER ORE BODIES E & M J, vol. 86, p. 313. 1 column
- OVERHAND STOPING AT THE MONTEZUMA MINES, COSTA RICA E. & M. J, vol. 90, p. 715 1 column.
- OVERHAND STOPING METHODS IN THE CENTRE STAR MINES, BRITISH COLUMBIA. E. & M. J, vol. 89, p. 18. 2 columns
- OVERHAND STOPING AT METCALF, ARIZONA. E. & M. J., vol. 90, pp 121 and 123 I.
- BACK OR OVERHAND STOPING AT CANANEA E & M. J, vol. 90, p. 964. 2 columns. I
- BACK STOPING P. C. M & M Soc. S. A, vol. 7, p. 367. $\frac{1}{2}$ column
- BACK STOPING VS. UNDERHAND STOPING IN LARGE BODIES OF IRON PYRITES. By J. J. Rutledge. E. & M. J, vol. 86, p. 365 2 $\frac{1}{2}$ columns.
- A MODIFIED SYSTEM OF BACK STOPING. By J. E. Wilson E & M. J., vol. 90, p. 950. 1 $\frac{1}{2}$ columns. I.
- BACK STOPING IN THE COPPER MINES OF MICHIGAN. Min. & Sci Press, vol. 96, p. 847. 1 column.
- STULL STOPING AT THE COMBINATION MINE. Min & Sci Press, vol. 95, p. 435. 6 columns. I.
- RILL STOPING. E. & M. J, vol. 89, p. 357. $\frac{1}{2}$ column.
- RILL STOPING IN BROKEN HILL MINES. T. Au I. M E., vol. 9, p. 129. 2 pages. I.
- METHODS OF STOPING: Rill, Shrinkage and Flat Back Systems. E. & M. J, vol. 85, p. 196. 1 column.
- RILL STOPING AT KALGOORLIE. Min. & Sci Press, vol. 100, p. 391 1 column.
- RILL STOPING AT THE SUPERIOR AND BOSTON MINE, ARIZONA M & M, vol. 31, p. 112 4 columns I
- SHRINKAGE STOPING AT THE CRESSON MINE, CRIPPLE CREEK, COLORADO. M. & M, vol. 31, p. 735. 3 $\frac{1}{2}$ columns I.
- "SHRINKAGE" STOPING IN WESTERN AUSTRALIA By F P Rolfe T. I. M. & M, vol. 18, p. 291 26 pages. I
- SHRINKAGE STOPING AT THE LOS PILARES MINE, MEXICO M & M, vol. 31, p. 108 7 columns. I.
- ADVANTAGES AND DISADVANTAGES OF SHRINKAGE STOPING T. I M & M, vol. 18, p. 297. 4 pages
- SHRINKAGE STOPING ON THE RAND. Min. Mag. London, vol. 4, p. 145. 2 columns. I
- SHRINKAGE STOPING AT DUCKTOWN MINES. E & M. J, vol. 89, p. 464. 1 column. I.
- SHRINKAGE STOPING. E & M. J., vol. 89, p. 358. $\frac{1}{2}$ column
- THE SHRINKAGE SYSTEM OF STOPING AS EMPLOYED AT KALGOORLIE. Min. & Sci. Press, vol. 100, p. 391. 1 column.
- SHRINKAGE STOPING AT THE LOS PILARES MINE, MEXICO. Min. & Sci Press, vol. 100, p. 888 2 columns I
- SHRINKAGE STOPING IN WESTERN AUSTRALIA. By F. P Rolfe. M. & M., vol. 30, p. 210. 6 $\frac{1}{2}$ columns. I.
- THE SHRINKAGE OR "LAY" SYSTEM OF STOPING P. C. M & M. Soc. S. A, vol. 10, p. 301. $\frac{1}{2}$ column
- SHRINKAGE STOPING IN WESTERN AUSTRALIA. P. C M & M Soc S A, vol. 10, p. 30. $\frac{1}{2}$ column.
- THE SHRINKAGE SYSTEM OF STOPING AT CANANEA. E & M J., vol. 90, p. 964 2 columns. I.

RESULTING IN MINING. P. C. M. & M. Soc. S A, vol 8, p. 48. $\frac{1}{2}$ column.

RESULTING IN MINING. P C M. & M Soc S A, vol 7, p 367 1 column

STOPING AT THE CABIN BRANCH MINE, VIRGINIA By J. Tyssowski. E & M. J., vol. 89, p. 32. $1\frac{1}{2}$ columns.

STOPING IN BARITE MINES, MISSOURI. T A. I M E, vol 40, p. 728. $6\frac{1}{2}$ pages I

See also OCCURRENCE OF BARYTES, and METHODS OF MINING, ETC, also COST OF STOPING

Under-Sea Mining

SUBMARINE COAL MINING By J. Johnson. J M Soc N S, vol 13, p 47. 4 pages

SUBMARINE MINING. Min. Mag., vol 8, p 56 4 pages.

SUBMARINE DIVERS IN MINES. By G. F Duck. M. & M., vol. 31, p. 446. $1\frac{1}{2}$ columns.

See also first volume of INDEX

Mining Frozen Gravels

THAWING FROZEN GRAVEL IN THE NORTH. Min. & Sci. Press, vol 98, p. 382 3 columns I.

THAWING FROZEN GRAVEL IN THE YUKON. Min & Sci. Press, vol 97, p. 354. 2 columns I.

THAWING FROZEN GRAVEL. Min & Sci Press, vol 97, p. 812. 2 columns. I.

See also first volume of INDEX.

See also LONGWALL MINING.

Packing Mine Workings: Flushing Culm, Use of Waste

SPACE OCCUPIED BY BROKEN STONE. M. & M, vol 30, p 334. $\frac{1}{2}$ column

A FILLING METHOD OF MINING SOFT ORE. Min. & Sci. Press, vol 99, p 97. 4 columns. I.

THE FILLING SYSTEM APPLIED TO WIDE ORE BODIES. E & M. J., vol 87, p. 1178. 5 columns. I

THE SPUELVERSATZ METHOD OF HYDRAULIC FILLING E & M. J., vol 89, p 306 1 column. I.

FILLING METHOD OF MINING AT THE MOUNT MORGAN MINE. E & M J., vol 87, p. 750 2 columns.

THE FILLING SYSTEM AT THE MOUNT MORGAN MINE E & M J, vol 87, p 638 2 columns I.

FILLING STOPES IN THE AUSTRALIAN MINES T. Au. I M. E, vol 7, p 197. 18 pages I

FILLING STOPES WITH TAILING AT KALGOORLIE Min Mag, London, vol. 3, p 452 1 column I.

THE FILLING SYSTEMS AT THE BROKEN HILL MINES, NEW SOUTH WALES. E & M J, vol 86, p 794 4 columns. I.

FILLING STOPES IN THE AUSTRALIAN MINES. T Au I. M E, vol. 7, p 197 18 pages I

FLUSHING IN METAL MINES. E. & M. J, vol 86, p. 4 1 column.

SILTING AT WAIHI By A. Jarman. Min Mag, London, vol 3, p 191. 8 columns I.

FILLING METHOD OF MINING AT THE HOMESTAKE MINE E. & M. J, vol 90, p 74. $7\frac{1}{2}$ columns I

FILLING IN THE CLIFTON-MORENCI MINES Min & Sci Press, vol. 101, p 831 $\frac{1}{2}$ column.

FILLING METHOD USED IN ARIZONA COPPER MINES. Min & Sci. Press, vol. 99, p 393. $\frac{1}{2}$ column.

ROCK FILLING AT RIO TINTO By E. Levy E & M. J, vol 89, p. 363. $2\frac{1}{2}$ columns

FILLING METHOD OF MINING EMPLOYED IN THE COAHUILA DISTRICT, MEXICO E & M. J., vol 89, p. 1073 $\frac{1}{2}$ column

"DRY-WALL" FILLING METHOD IN THE SOUTH RANGE MINES, MICHIGAN. Min. & Sci. Press, vol 96, p 850. $\frac{1}{2}$ column I.

See also METHODS OF MINING, ETC.

HYDRAULIC STOPE FILLING AT THE ROBINSON MINE P C M & M. Soc. S A, vol. 10, p. 300 $\frac{3}{4}$ column.

FILLING STOPES AT THE SIMMER AND JACK. Min Mag London, vol 4, p. 67. $1\frac{1}{2}$ columns I

FILLING METHOD EMPLOYED AT THE LOS PILARES MINE, MEXICO. M. & M., vol. 31, p 109. $4\frac{1}{2}$ columns I.

FILLING ABANDONED WORKINGS WITH CULM OR SAND: European Practice. By H. M Payne E & M. J, vol. 89, p. 522 $4\frac{1}{2}$ columns. I.

SAND FILLING IN THE TRANSVAAL MINES. Min & Sci Press, vol 101, p. 333 $\frac{3}{4}$ column.

SAND FILLING ON THE WITWATERSRAND. By E. PAUR. P C M. & M. Soc S A, vol 10, p 429. $8\frac{1}{2}$ columns. I.

SAND FILLING ON THE CENTRAL RAND. E & M. J, vol. 90, p 59 1 column.

SAND FILLING ON THE RAND E & M. J, vol 90, p. 805 $\frac{1}{2}$ column

SAND FILLING IN THE IRON MINES OF PEINE, GERMANY. T. A. I. M E, vol 39, p 355 2 pages

See also DISPOSAL OF WASTE.

BACK FILLING BY FLUSHING IN THE SILESIA COAL MINES. E. & M. J. vol. 86, p. 889 $12\frac{1}{2}$ columns. I.

DISTRIBUTION OF FILLING IN THE SILESIA MINES Dams, Pipes, Etc E & M J, vol 86, p. 891. 2 columns. I

See also UNDERGROUND DAMS

STOWING IN CARMAUX, FRANCE, COAL MINES. E. & M J, vol 86, p. 576. 4 columns I.

ASHES FOR PILLARS IN COAL MINES. E & M J, vol 86, p. 581. $\frac{1}{2}$ column.

THE FLUSHING PROBLEM IN THE ANTHRACITE REGION E. & M. J., vol 88, p. 564. $3\frac{1}{2}$ columns

FLUSHING OLD WORKINGS. Coal Mining Supplement, E & M. J., vol. 88, p. 21. $\frac{1}{2}$ column.

HYDRAULIC STOWING OF GOB AT SHAMROCK I AND II COLLIERY, HERNE, WESTPHALIA, GERMANY. By H. C Annett T I. M. E., vol 37, p. 257. 20 pages. I.

THE ADVANTAGES OF FLUSHING IN COAL MINING By L. W. Mayer. E. & M. J, vol. 86, p. 1. $12\frac{1}{2}$ columns. I.

See also METHODS OF MINING COAL, MINE SUPPORT, SUBSIDENCE IN MINE WORKINGS, and COST OF SUPPORT.

River Mining

See first volume of INDEX.

Deep Mining

LIMITS OF DEEP MINING. P. C. M. & M Soc. S A, vol 10, p. 414. $2\frac{1}{2}$ columns.

DEPTH OF MINES AT BUTTE. E. & M. J, vol 85, p. 97. Table.

DEEP MINING AT GRASS VALLEY, CALIFORNIA E & M. J, vol 87, p 348. 1 column.

DEEP MINING AT BENDIGO. By W. J. Rickard Min Mag., London, vol. 3, p 281. 4 columns. I.

DEEP MINING IN TRANSVAAL. By R. GASCOYNE Min & Sci Press, vol. 101, p 332. $4\frac{1}{2}$ columns. I.

THE DEEP MINES OF KEWEENAW POINT, MICHIGAN. Min. & Sci. Press, vol 96, p. 847. $\frac{1}{2}$ column

DEEP MINING IN THE GUANAJUATO DISTRICT, MEXICO By F. H. Robert E & M. J., vol. 90, p 1310. $6\frac{1}{2}$ columns. I.

See also PERMANENCE IN DEPTH, and DEVELOPMENT.

Beach Mining

See first volume of INDEX.

See also COST OF EXCAVATING.

**Excavation of Earth, Rock and Ore,
Use of Steam Shovels, Mechanical
Excavators and Unloaders**

EARTHWORK: The Profile of Quantities By S. B. Fisher. P. E. Soc. W. Pa., vol. 3, p. 45 4½ pages. D.

THE CULEBRA CUT OF THE PANAMA CANAL By A. S. Zinn J. W. Soc. E., vol. 12, p. 820. 19 pages. I

POWER SHOVEL FOR UNDERGROUND WORK. E. & M. J., vol. 86, p. 1056. 2 columns. I.

THE THRU AUTOMATIC STEAM SHOVEL FOR UNDERGROUND WORK. M. & M., vol. 29, p. 575. 2 columns

STEAM SHOVEL WORK AT ELY, NEVADA. Min. & Sci. Press, vol. 98, p. 59. 2 columns. I.

STEAM SHOVEL WORK IN BINGHAM CANYON, UTAH Min. & Sci. Press, vol. 98, p. 518 1½ columns I

STEAM SHOVEL IN THE AMUER REGION. Min. & Sci. Press, vol. 98, p. 731. 1 column. I.

STEAM SHOVEL IN COPPER MINING, ELY, NEVADA By F. S. Pheby. Min. & Sci. Press, vol. 97, p. 161. 1 column. I.

BREAKING GROUND FOR STEAM SHOVELS' Gophering E. & M. J., vol. 88, p. 696. 1½ columns

MINING COPPER ORE WITH STEAM-SHOVELS. By L. A. Palmer Min. Mag. London, vol. 4, p. 293. 5 columns. I.

THE DRAG-LINE EXCAVATOR By J. P. Hutchins Min. Mag., London, vol. 3, p. 359. 6½ columns. I

A NEW TYPE OF GIANT EXCAVATOR. By F. A. Talbot E. & M. J., vol. 90, p. 564. 2½ columns I.

See also first volume of INDEX, and OPEN-CUT MINING.

**Open-cut Mining, Milling Methods
Etc.**

STRIPPING CLINTON IRON ORE IN NEW YORK STATE. By E. Higgins. E. & M. J., vol. 86, p. 1150. 8 columns. I.

STRIPPING IN BINGHAM CANYON. E. & M. J., vol. 87, p. 1186 1 column.

STRIPPING COAL BEDS M. & M., vol. 31, p. 69 4 columns. I

STRIPPING AND OPEN-CUT WORK IN THE JOPLIN DISTRICT. M. & M., vol. 30, p. 503 4 columns. I.

NOVEL SPOIL TRANSPORTER FOR STRIPPING OPERATIONS By F. A. Talbot E. & M. J., vol. 88, p. 510 7 columns. I.

OPEN-CUT MINING IRON ORES IN CUBA M. & M., vol. 31, p. 247 2 columns. I

LOCATION OF OPEN-CUT PITS. M. & M., vol. 29, p. 343. ¼ column.

OPEN-PIT IRON MINING ON THE MESABI RANGE. By J. F. Walff. M. & M., vol. 29, p. 291, 6 columns, I; p. 343, 14 columns, I

OPEN-CUT MINING AT THE PREMIER MINE, SOUTH AFRICA. E. & M. J., vol. 89, p. 370. 1½ columns. I.

OPEN-CUT MINING AT THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 748. 2½ columns I

OPEN-CUT MINING IN THE LORRAINE OOLITIC IRON ORE DEPOSITS OF GERMANY AND FRANCE E. & M. J., vol. 87, p. 1224. 2 columns.

OPEN-CUT MINING IN ALASKA AND THE YUKON Min. & Sci. Press, vol. 98, p. 587. 8 columns. I.

OPEN-CUT MINING IN THE TURQUOISE MINES OF NEW MEXICO. E. & M. J., vol. 86, p. 845. 1½ columns.

TIN MINING IN ULN SELANGOR, FEDERATED MALAY STATES. By E. Nightingale. T. I. M. & M., vol. 17, p. 159. 12½ pages I.

TONNAGE ESTIMATION IN DUMPS, OPEN CUTS, ETC. By R. J. Donaldson. E. & M. J., vol. 87, p. 640. 8½ columns. I.

HYDRAULIC EXCAVATION ON THE PANAMA CANAL. Min. & Sci. Press, vol. 100, p. 609. 7½ columns. I.

MINING AND MILLING FLORIDA PHOSPHATES. By C A. Stone. E & M. J., vol. 87, p. 490. 8 columns. I.

STRIPPING A VEIN BY HYDRAULICKING. By A F Hughes. Min. & Sci. Press, vol. 99, p 788. 2½ columns. I.

See also **HYDRAULIC MINING.**

THE MILLING SYSTEM AS EMPLOYED IN MINING THE IRON ORES OF SUNRISE, WYOMING. E. & M J, vol 85, p 400. 3 columns I.

NOTES ON THE MILLING SYSTEM OF MINING By A H Fay E & M. J, vol 88, p. 919. 2½ columns. I.

THE MILLING SYSTEM OF MINING AT MOUNT MORGAN MINE. E. & M. J, vol. 87, p. 836 1 column.

GLORY HOLE MINING AT DE LAMAR, NEVADA By W. R Wardner. E & M. J, vol 87, p. 451. 6 columns. I.

GLORY HOLE MINING AT PHOENIX, BRITISH COLUMBIA. E & M J, vol 88, p 1260 1½ columns I.

See also **MINING THICK AND MASSIVE DEPOSITS, EXCAVATION OF EARTH, ROCK AND ORE, ETC, COST OF METAL-MINING, and COST OF STRIPPING.**

Quarrying Methods

DEVELOPMENTS IN QUARRYING PROCESSES. By A. S. Atkinson E & M. J, vol. 88, p 208. 5 columns.

See also first column of **INDEX, and COST OF MINE AND MILL CONSTRUCTION**

Hydraulic Mining: Methods and Appliances, Giants, Elevators, Etc.

HYDRAULIC MINING Min & Sci Press, vol. 20, p 322. 1½ columns.

NOTES ON HYDRAULIC MINING. M. & M, vol 28, p. 1. 8 pages I.

A WORD ABOUT HYDRAULIC MINING Min. & Sci. Press, vol 20, p. 5. 1½ columns. I.

HYDRAULIC MINING OF AURIFEROUS GRAVELS. By J. W. Phillips. J. W. Soc. E., vol 15, p. 431. 40 pages I.

EXAMINING AND FITTING UP A HYDRAULIC MINE. By H. A. Brigham E. & M. J, vol 86, p 1257, 10½ columns; vol 87, p 23, 19½ columns, I.

MOBILITY IN PLACER MINING By J. P. Hutchins Min Mag, London, vol. 3, p. 60. 3½ columns I.

HYDRAULIC MINING ON THE PACIFIC COAST. By A H Martin. M. & M, vol. 30, p 261. 4½ columns. Maps.

ART OF PLACER PIPING. By D. H. Stovall. Min. & Sci Press, vol 99, p. 661 2½ columns I.

USE OF BY-WATER SUPPLY FOR HYDRAULIC MINING. By D H. Stovall. Min. & Sci. Press, vol 101, p 119. 2½ columns I

ALLUVIAL MINING Its Necessary Plant and Appliances By S. C. N. Bell T Au I M E., vol 12, p. 30. 32 pages

THE HYDRAULIC EQUIPMENT OF THE OLD CHANNEL MINES. By J M Nicol Min. & Sci. Press, vol. 95, p. 333 6 columns. I.

PUMP SLUICING FOR GOLD. By H. Herman Min & Sci Press, vol. 98, p. 252 2½ columns

GRAVEL PUMP MINING, WESTERN AUSTRALIA T Au I M E., vol. 8, pt 1, p 33. 4 pages

See also **PUMPS FOR MINE USE.**

SLUICES AND UNDERCURRENTS. T Au. I M. E., vol. 4, p. 50. 6 pages

AUSTRALIAN SLUICES P. C M. & M. Soc S A., vol. 8, p 171. 4 columns I

A SLUICE FOR HYDRAULIC MINING. E & M. J, vol 86, p 1259. 1½ columns.

SLUICES USED IN THE LA GRANGE HYDRAULIC MINE. Min & Sci. Press, vol. 97, p. 492 3 columns. I.

- THE BLOWING-DOWN SYSTEM OF SLUICING By J Park. Min. & Sci Press, vol. 97, p 218. 2 columns. I.
- THE LONG TOM AND HYDRAULIC MINING IN CALIFORNIA By R. H. Campbell Min. & Sci Press, vol 100, p. 934 3 columns I.
- DROP SLUICES Undercurrents. By D H Stovall. Min & Sci Press, vol 100, p 801. 1½ columns I
- UNDERCURRENTS USED IN THE SOUTH AFRICAN TIN FIELDS E & M. J., vol 89, p. 471. 1 column. I.
- UNDERCURRENTS FOR HYDRAULIC MINING E. & M. J., vol 87, p 25. 1½ columns I.
- SLUICE CONSTRUCTION FOR HYDRAULIC MINING. E & M J., vol 87, p 23 7 columns I
- HAND SLUICING AT NOME AND THE YUKON Min. & Sci Press, vol 98, p 86. 8 columns I.
- DITCHES IN HYDRAULIC MINING E & M J., vol. 87, p. 28. 1½ columns.
- THE YUKON DITCH By T. A. Rickard Min & Sci Press, vol 98, p. 117, 7½ columns, I, p 148, 6½ columns, I
- THE BONANZA DITCH OF THE YUKON GOLD COMPANY By E Jacobs E & M J., vol. 88, p 457 2 columns I.
- DRAIN TUNNEL IN HYDRAULIC MINING E. & M. J., vol 86, p. 1259. 1 column.
- FLUMES IN HYDRAULIC MINING. E. & M. J., vol. 87, p 28. 2 columns. I.
- See also FLUMES MATERIALS OF CONSTRUCTION AND DESIGN, and DITCHES AND CHANNELS
- HYDRAULICKING PIPE-CLAY GRAVEL. D. H. Stovall. Min & Sci. Press, vol. 100, p. 159. 2½ columns I.
- HYDRAULICKING THE COVER OFF A VEIN Min & Sci. Press, vol. 99, p 788 2½ columns. I.
- HYDRAULIC ELEVATORS. E. & M. J., vol. 87, p 27. 1 column.
- GRAVEL ELEVATION IN SISKIYOU COUNTY, CALIFORNIA By C S. Haley Min & Sci Press, vol. 101, p 701 2½ columns I
- THE RUBLE HYDRAULIC ELEVATOR. By J. McD. Porter E & M J., vol. 88, p. 1213 5 columns I
- THE RUBLE BOULDER AND GRAVEL ELEVATOR. E & M J., vol. 86, p. 902 3 columns. I
- THE RUBLE HYDRAULIC ELEVATOR By J M Porter T A. I M. E., vol. 40, p. 561. 5 pages I.
- See also ELEVATORS
- HYDRAULIC SUCTION ELEVATOR. By D B Waters. T Au I M. E., vol 11, p. 114. 6 pages I.
- A ROCKER. By D Waterman. Min. & Sci Press, vol 98, p 293 1½ columns I
- THE BUTARA OR WASHING MACHINE FOR GOLD GRAVELS IN SIBERIA Min & Sci Press, vol 99, p. 423. ½ column. I
- STEAM SCRAPER FOR PLACER MINING By H W Turner Min. & Sci Press, vol. 97, p 191. ½ column. I.
- BUCKET SCRAPER FOR USE IN PLACER MINING. Min & Sci Press, vol. 101, p 43 2 columns I.
- See also EXCAVATION OF EARTH, ROCK, ETC.
- STACKER FOR HYDRAULICKING By S. S Smith. Min. & Sci. Press, vol. 100, p. 290. 3 columns. I.
- See also DREDGING FOR GOLD AND OTHER MATERIALS.
- DIFFERENT METHODS OF ALLUVIAL MINING IN VICTORIA. By S. Hunter. T Au. I M. E., vol. 8, pt. 2, p. 188. 2 pages.
- ALLUVIAL WORKINGS AT ADDISON'S FLAT, NEW ZEALAND. By A. G. Macdonald E. & M. J., vol. 87, p 198. 4 columns. I.
- METHODS OF WORKING ALLUVIAL DEPOSITS OF VICTORIA. T. I. M. & M., vol. 17, p. 224. 4 pages. I.

- HYDRAULIC MINING AS APPLIED TO WESTERN AUSTRALIA.** By R. N. Wells. T. Au. I. M. E., vol. 8, pt. 1, p. 31. 9 pages.
- SOME NOTES ON HYDRAULICKING AND GROUND SLUICING IN NEW ZEALAND, AND COMPARISONS WITH THE DRIFT GRAVEL OF THE CORINNA DISTRICT IN TASMANIA.** By E. M. Thornley. T. Au. I. M. E., vol. 4, p. 50. 6 pages.
- HYDRAULIC SLUICING IN AUSTRALIA.** T. Au. I. M. E., vol. 12, p. 34. 14 pages.
- HYDRAULICKING IN CALIFORNIA** By H. P. Gordon. Min. & Sci. Press, vol. 100, p. 751. 3½ columns I
- HYDRAULICKING IN TRINITY COUNTY, CALIFORNIA.** Min. & Sci. Press, vol. 101, p. 143. 2 columns.
- CLEANING UP AN OLD MILL YARD: Hydraulicking a Mill Site for Gold in California** By W. H. Storms. E. & M. J., vol. 89, p. 646. 3 columns. I.
- MINING DIAMONDS AT BAHIA, BRAZIL.** E. & M. J., vol. 87, p. 986. 3 columns. I.
- See also OCCURRENCE OF DIAMONDS and BRAZIL.**
- HYDRAULICKING PLATINUM DEPOSITS IN BRITISH COLUMBIA** J. C. M. I., vol. 13, p. 313. 5 pages. I.
- HYDRAULIC MINING AT SAN ANTONIO, PERU.** Min. & Sci. Press, vol. 97, p. 780. 4 columns. I
- PHILIPPINE PLACER MINING.** Min. & Sci. Press, vol. 99, p. 267. ½ column.
- THE BRANDY CITY HYDRAULIC MINE** By G. F. Taylor. E. & M. J., vol. 89, p. 1152. 3 columns. I.
- METHOD OF WORKING LUMPKIN COUNTY PLACERS, GEORGIA.** Min. Mag., vol. 10, p. 469.
- GOLD MINING BY THE HYDRAULIC PROCESS IN NORTH CAROLINA AND GEORGIA.** By T. L. Clingman. Min. Mag., vol. 10, p. 27. 4 pages.
- PROSPECTING AND MINING GOLD PLACERS IN ALASKA** By J. P. Hutchins. U. S. G. S., Bull. 345, p. 54. 24 pages. 1907.
- See also PROSPECTING, ETC.**
- HYDRAULIC MINING IN ALASKA** By T. A. Rickard. Min. Mag., London, vol. 1, p. 139. 6 columns. I
- PLACER MINING IN ALASKA IN 1904.** By A. H. Brooks. U. S. G. S., Bull. 259, p. 18. 13 pages.
- METHODS AND COSTS OF GRAVEL AND PLACER MINING IN ALASKA** By C. W. Purington. U. S. G. S., Bull. 263. 273 pages. I. 1905
- NOME PLACER MINING.** By T. M. Gibson. Min. & Sci. Press, vol. 101, p. 809. 3½ columns
- PLACER MINING IN THE YUKON-TANANA REGION, ALASKA** By C. E. Ellsworth. U. S. G. S., Bull. 442, p. 230. 16 pages. 1909
- MINING IN THE FAIRHAVEN PRECINCT.** By F. F. Henshaw. U. S. G. S., Bull. 379, p. 355. 15 pages. I. 1908.
- PLACER GOLD MINING IN INTERIOR ALASKA.** E. & M. J., vol. 87, p. 591. 9 columns
- PLACER MINING OPERATIONS IN ALASKA IN 1909.** By A. H. Brooks. E. & M. J., vol. 90, p. 412. 8½ columns. Map.
- MINING AND MINING METHODS OF THE YUKON.** By A. A. Bare. J. C. M. I., vol. 11, p. 545. 24 pages. I.
- HYDRAULIC MINING IN COLOMBIA.** Min. & Sci. Press, vol. 98, p. 220. ½ column. I.
- THE CARIBOO CONSOLIDATED HYDRAULIC PLANT, BULLION, BRITISH COLUMBIA.** By W. J. Dick. J. C. M. I., vol. 10, p. 418. 8 pages.
- HYDRAULIC MINING IN CARIBOO.** By D. Waterman. Min. & Sci. Press, vol. 95, p. 302. 5 columns. I.
- TIN SLUICING IN TASMANIA.** By E. Edwards. M. & M., vol. 31, p. 309. 12 columns. I.

- HYDRAULIC MINING FOR TIN IN THE MALAY STATES** Min & Sci Press, vol. 98, p 32 7 columns I
- GROUND-SLUCING IN THE MALAY STATES** Min & Sci Press, vol 98, p. 34 3 columns I.
- See also **MALAYSIA and OCCURRENCE OF TIN**
- TIN PLACER MINING IN THE BOLIVIAN ANDES.** E & M. J., vol. 90, p 1054. $\frac{1}{2}$ column
- HYDRAULIC MINING IN TIN MINES OF CAPE COLONY** P. C. M & M Soc S. A., vol. 8, p. 171. 8 columns I.
- See also **COST OF PIPES AND PIPE LAYING.**
- See also **COST OF FLUME CONSTRUCTION and COST OF HYDRAULIC MINING, also COST OF MINE AND MILL CONSTRUCTION.**
- Dredging for Gold and Other Materials: Practice and Appliances**
- HISTORY OF SUCTION-DREDGING IN GOLD-BEARING GRAVEL** T. A. I. M E, vol 40, p. 499. 4 $\frac{1}{2}$ pages.
- DEVELOPMENTS IN GOLD DREDGING DURING 1908.** By J P. Hutchins E & M J, vol 87, p 200 9 columns.
- DEVELOPMENT OF DREDGES FOR PLACER DEPOSITS.** By G B. Massey. E. & M. J., vol. 87, p. 833. 7 $\frac{1}{2}$ columns I.
- EVOLUTION OF THE CALIFORNIA DREDGE** By G. L. Hurst. M. & M., vol. 29, p 401. 2 $\frac{1}{2}$ columns I.
- RECENT DEVELOPMENTS IN GOLD DREDGING** By F. W. Griffin. Min. & Sci. Press, vol. 97, p. 219. 6 $\frac{1}{2}$ columns I.
- NOTES ON THE CONSTRUCTION OF CALIFORNIA DREDGES.** By J. Tyssowski. E. & M. J., vol. 90, p. 765. 9 columns. I.
- SPECIFICATIONS FOR A HYDRAULIC GOLD DREDGE.** T. A. I. M. E, vol. 40, p 506. 10 pages.
- NEW MACHINERY FOR RIVER EXPLORATION: Dredging, Etc.** Min. Mag., vol. 4, p 61 7 $\frac{1}{2}$ pages. I
- DREDGING FOR GOLD.** Min. Mag, London, vol 2, p. 217. 7 columns I.
- HYDRAULIC DREDGING FOR GOLD** By H. G. Granger. Min & Sci. Press, vol. 99, p 35 1 $\frac{1}{2}$ columns.
- BY-PRODUCTS OF GOLD DREDGING.** E. & M. J., vol. 86, p 119. $\frac{1}{2}$ column
- HYDRAULIC DREDGING FOR GOLD-BEARING GRAVELS** By H O. Granger. T. A. I. M E, vol 40, p 496. 20 $\frac{1}{2}$ pages. I
- HYDRAULIC DREDGING OR THE WORKING OF DEEP ALLUVIAL DEPOSITS BY ELEVATORS WITH CENTRIFUGAL PUMPS.** By A. S Kenyon. T. Au. I M. E, vol. 5, p 275. 12 pages. I.
- GOLD DREDGING AS AN INVESTMENT.** By A. C. Ludlum E & M J., vol. 85, p. 315. 2 $\frac{1}{2}$ columns.
- PROSPECTING DREDGE.** E & M. J., vol 86, p. 705 $\frac{1}{2}$ column.
- FUTURE OF DREDGING.** By C Janin. Min. & Sci Press, vol 101, p. 868. 6 $\frac{1}{2}$ columns
- DREDGING AND SAMPLING OF PLACER GROUND** By A P. Rogers. E. & M J, vol. 89, p 561. 5 columns. I.
- See also **METHODS OF SAMPLING**
- EXAMINATION OF GOLD DREDGING PROPERTIES.** By T S. Ruh E. & M. J., vol 87, p. 893 5 columns I.
- See also **VALUE OF MINES, ETC**
- FAILURES IN SPUDS FOR GOLD DREDGES.** By H D. Smith. Min. & Sci. Press, vol. 98, p. 728. 2 $\frac{1}{2}$ columns. I.
- CLAY CUTOFF, ISABEL DREDGE.** By W. B. Winston Min & Sci. Press, vol. 101, p. 838. 3 $\frac{1}{2}$ columns I
- OVERFLOW FROM DREDGE PITS AT OROVILLE.** Min. & Sci. Press, vol. 98, p 326. 1 $\frac{1}{2}$ columns.
- RESTORING DREDGED GROUND.** E. & M J., vol 87, p. 946 4 columns. I.
- RESTORING DREDGED GROUND.** By A S. Atkinson. M. & M., vol. 31, p. 422 2 $\frac{1}{2}$ columns. I.

See also CONSERVATION.

DREDGING FROZEN GROUND IN KLONDIKE. E & M. J., vol. 85, p. 512. 4½ columns.

DREDGING CONDITIONS ON THE SEWARD PENINSULA. By G B Massey E. & M. J., vol. 90, p. 859. 20½ columns. I.

DREDGING NOME BEACH SANDS M. & M., vol. 30, p. 494. 4 columns. I.

DREDGING ON THE SEWARD PENINSULA. By T. A. Rickard. Min & Sci Press, vol. 97, p. 734. 14 columns. I.

DREDGING IN THE YUKON By T. A. Rickard. Min & Sci Press, vol. 97, p. 290, 5½ columns, I, p. 354, 6 columns, I.

PONY DREDGES IN ALASKA By W. H. Washburn. Min. & Sci Press, vol. 100, p. 352. 5 columns. I.

DREDGING AT NOME IN 1909 Min & Sci. Press, vol. 100, p. 47. 6½ columns. I.

HYDRAULIC DREDGING IN AUSTRALIA. T. Au. I. M. E., vol. 12, p. 58. 5 pages.

BUCKET DREDGING IN NEW ZEALAND. T. Au. I. M. E., vol. 12, p. 49. 8 pages.

GOLD DREDGING IN OTAGO, NEW ZEALAND By F. T. Seelye T. Au. I. M. E., vol. 9, p. 181. 14 pages. I.

THE GOLD DREDGING INDUSTRY IN NEW ZEALAND By W. Wyhe. T. Au. I. M. E., vol. 7, p. 102. 10 pages.

THE CAREER OF THE GOLD DREDGE IN NEW SOUTH WALES By D. K. Blair. T. Au. I. M. E., vol. 10, p. 289. 19½ pages.

DREDGING INDUSTRY IN NEW ZEALAND. By A. C. Buckland. Min. & Sci. Press, vol. 98, p. 758. 1½ columns.

DREDGING AT BUTTE By A. F. Bushnell. E & M. J., vol. 87, p. 991. 3½ columns. I.

GOLD DREDGING PRACTICE IN CALIFORNIA. By Robt. Sibley E & M. J., vol. 85, p. 1083. 15½ columns. I.

DREDGING AT OROVILLE By D. Waterman. Min. & Sci. Press, vol. 98, p. 785. 7½ columns. I.

LESS KNOWN GOLD DREDGES IN CALIFORNIA. By W. M. Knox Min & Sci Press, vol. 101, p. 16. 3 columns. I.

GOLD DREDGING ON THE CHOCO RIVER, REPUBLIC OF COLOMBIA, SOUTH AMERICA By H. G. Granger. T. A. I. M. E., vol. 39, p. 392. 27 pages. I.

DREDGING CONDITIONS IN COLOMBIA. By A. P. Rogers E. & M. J., vol. 87, p. 1003. 2 columns.

GOLD DREDGING GROUND IN THE UPPER AMAZON VALLEY E & M. J., vol. 87, p. 643. 2½ columns.

DREDGING AT BRECKENRIDGE, COLORADO By A. H. Bradford and R. P. Curtis. Min. & Sci. Press, vol. 99, p. 361. 11 columns. I.

CONDITIONS OF GOLD DREDGING IN FRENCH GUIANA. By A. Bordeaux. E & M. J., vol. 90, p. 562. 6½ columns. I.

DREDGING IN THE RIVERS OF FRENCH GUIANA T. A. I. M. E., vol. 41, p. 583. 8 pages.

DREDGING POSSIBILITIES IN KOREA. By R. Y. Hanlon Min & Sci. Press, vol. 100, p. 831. 3½ columns. I.

GOLD DREDGING IN THE PHILIPPINES. E. & M. J., vol. 88, p. 974. 3 columns. I.

GOLD DREDGING AT PARACALE, PHILIPPINE ISLANDS. Min. & Sci. Press, vol. 100, p. 258. 3½ columns. Map.

GOLD DREDGING IN RUSSIA. By I. I. Rogovin E & M. J., vol. 87, p. 1050. 1½ columns.

DREDGING AT NEVANSK. By C. W. Purington. Min. Mag., London, vol. 2, p. 206. 4 columns. I.

DREDGING FOR PLATINUM IN THE URALS, RUSSIA. By L. Tovey E. & M. J., vol. 86, p. 701 15 columns. I.

GOLD DREDGING IN SIBERIA. By J. B. Landfield Min. & Sci. Press, vol. 99, p. 423 4½ columns. I.

PRODUCTION OF URAL AND SIBERIAN DREDGES FOR 1909. Min. & Sci. Press, vol. 101, p. 764. 3½ columns. Tables

See also COST OF DREDGING

Mining Débris: Damages and Litigation

A CALIFORNIA DÉBRIS DECISION. E. & M. J., vol. 85, p. 408. 1½ columns.

DÉBRIS CONTROL IN THE SACRAMENTO VALLEY. By A. D. Foote Min. & Sci. Press, vol. 99, p. 688. 2½ columns. I.

ANTI-DÉBRIS ACTION IN CALIFORNIA. E. & M. J., vol. 86, p. 181 ½ column.

See also first volume of INDEX

Reworking Abandoned Mines

REOPENING THE MEXICAN MINE, COMSTOCK LODGE By W. Symmes. Min. & Sci. Press, vol. 100, p. 419. 8½ columns. I.

See also first volume of INDEX.

Waste in Mining

WASTE IN MINING. E. & M. J., vol. 86, p. 461. ½ column.

WASTAGE OF THE PRECIOUS METALS By A. B. Paul. Min. & Sci. Press, vol. 22, p. 339, 2 columns; p. 355, 1½ columns; p. 371, 1½ columns.

PLATINUM AND GOLD LOSSES IN DREDGING. By W. B. Winston Min. & Sci. Press, vol. 99, p. 234. 1½ columns.

WASTE IN COAL MINING. T. A. I. M. E., vol. 40, p. 259. 1½ pages.

MAXIMUM RECOVERY OF COAL, GEORGES CREEK REGION. By H. V.

Hesse. M. & M., vol. 29, p. 373. 11½ columns. I.

MINING METHODS FOR MAXIMUM RECOVERY OF COAL. By H. V. Hesse. E. & M. J., vol. 87, p. 303. 18½ columns. I.

LOSS OF COAL IN MINING FLAT SEAMS. E. & M. J., vol. 86, p. 138. 4 columns.

WASTE OF ANTHRACITE MINING: One-third of Production Sent to Culm Bank. Coal Mining Supplement, E. & M. J., vol. 88, p. 7. 1½ columns.

MINING WASTES IN ILLINOIS T. A. I. M. E., vol. 40, p. 31 12 pages. D.

WASTE IN THE PITTSBURGH DISTRICT: Fifty Percent Coal Lost. E. & M. J., vol. 89, p. 476 ½ column.

EARLY WASTE OF PETROLEUM. By X. W. Putnam. M. & M., vol. 30, p. 491. 3 columns. I.

LOSS IN SLUICING IN TIN MINING, CAPE COLONY P. C. M. & M. Soc. S. A., vol. 8, p. 175. ½ column.

See also METHODS OF MINING GENERAL AND MISCELLANEOUS, METHODS OF MINING COAL AND CONSERVATION.

Difficulties Encountered in Mining: High Temperatures, Etc., Increase of Temperature with Depth

TEMPERATURE IN THE COMSTOCK LODGE, NEVADA. T. A. I. M. E., vol. 41, p. 6. 7 pages.

INCREASE OF TEMPERATURE WITH DEPTH ON THE TRANSVAAL. Min. & Sci. Press, vol. 101, p. 332. ½ column.

ON MEASUREMENTS OF THE INCREASE OF TEMPERATURE IN BORE-HOLES: With the Depth, the Technics, and Practical Importance of the Same for Geological Prognosis, with Reference to New Measurements in Mexico, Borneo, and in Central Europe. By J. Koenigsberger and M. Muhlberg. T. I. M. E., vol. 39, p. 617. 29 pages.

ROCK TEMPERATURES AND DEEP MINING. E. & M. J., vol. 88, p. 32. 1 column.

TEMPERATURE AT GREAT DEPTH IN COAL MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 118. 1 column.

ROCK TEMPERATURES ON THE RAND. E. & M. J., vol. 90, p. 543. $\frac{1}{2}$ column.

RISE OF EARTH TEMPERATURE E & M. J., vol. 85, p. 1093. $\frac{1}{2}$ column.

TEMPERATURE IN DEEP COLLIERY WORKINGS. P. C. M. & M. Soc. S. A., vol. 8, p. 225. 1 column.

RATE OF RISE OF TEMPERATURE WITH DEPTH. P. C. M. & M. Soc. S. A., vol. 8, p. 226. Note.

EXPERIMENTS ON THE TEMPERATURE OF THE EARTH AT GREAT DEPTHS. By G. W. Alexander. Min. Mag., vol. 9, p. 523. 3 pages.

NOTES ON SOME OBSERVATIONS OF TEMPERATURE, ETC., IN THE DEEP MINES OF BENDIGO By J. Stirling. T. A. I. M. E., vol. 4, p. 94. 16 pages. I.

ADDENDUM TO PAPER ON EARTH TEMPERATURES ON WITWATERSRAND GOLD FIELDS. By H. F. Martlett. T. I. M. & M., vol. 17, p. 428. 1 page.

DRIFTING THROUGH RED-HOT ROCK, HOMESTAKE MINE. E. & M. J., vol. 85, p. 636. 1 column.

DRILLING IN THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL. E. & M. J., vol. 86, p. 757. 2 columns. I.

See also **MACHINE AND POWER DRILLS.**

PREVENTING CRUSH AND CREEP IN THE NORTHUMBERLAND, ENGLAND. E. & M. J., vol. 85, p. 411. 1 column.

SQUEEZES IN MINES AND THEIR CAUSES By R. D. N. Hill. M. & M., vol. 30, p. 286. $2\frac{1}{2}$ columns. I.

RECLAIMING CAVED GROUND AFTER A SQUEEZE By J. J. Rutledge E. & M. J., vol. 86, p. 411. 4 columns I.

See also **SUBSIDENCE IN MINE WORKINGS.**

MINING AROUND GAS WELLS M. & M., vol. 31, p. 486. $\frac{1}{2}$ column I.

See also **OCCURRENCE OF NATURAL GAS, CHURN DRILLS AND DRILLING, and PROSPECT DRILLING.**

Abandoned Mines and Districts

PSYCHOLOGY OF MINING BOOMS. By J. H. Curle. Min. & Sci. Press, vol. 96, p. 8. $2\frac{1}{2}$ columns.

PSYCHOLOGY OF MINING BOOMS. By C. Sachs. Min. & Sci. Press, vol. 96, p. 156. 4 columns.

See also first volume of **INDEX.**

Salting of Mines

MINE SALTING. By T. L. Carter. Min. Mag. London, vol. 4, p. 447. 4 columns.

See also first volume of **INDEX, and MINING RISKS AND FRAUDS**

MINE AND MILL MACHINERY

Mining Machinery: Its Manufacture and Use

AUTOGENEOUS WELDING FOR MINING MACHINERY E. & M. J., vol. 88, p. 119. 2 columns. I.

REPAIR WORK IN COLLIERY PRACTICE By J. A. Seager. E. & M. J., vol. 90, p. 1171. 6 columns. I.

See also first volume of **INDEX.**

Pulleys and Belts

See first volume of **INDEX.**

Bearings and Lubrication

THE COEFFICIENT OF FRICTION By W. Clifford. M. & M., vol. 31, p. 176. $3\frac{1}{2}$ columns. I.

DEVICES FOR SAVING LUBRICATING OIL. E. & M. J., vol. 85, p. 149. 2 columns. I.

SHAFTING FRICTION E & M. J., vol. 85, p. 544 1½ columns I.

See also first volume of INDEX.

Friction Clutches

See first volume of INDEX.

Friction Brakes

See first volume of INDEX.

Protection of Iron and Steel Structures

See first volume of INDEX

Mining Machinery at the Face

COAL MINING MACHINES T A I M E., vol. 41, p. 677. 26 pages. I

THE OPERATION OF COAL-CUTTING MACHINERY. By G. E. Lynch. E & M. J., vol. 86, p. 530. 6½ columns

THE ADVANTAGES OF MACHINE MINING. By F. W. Parsons. E. & M. J., vol. 89, p. 622 8½ columns. I.

COAL-CUTTING MACHINERY By R. Peele Sch Mines Quart., vol 31, p. 1. 24½ pages. I.

THE USE OF COAL-CUTTING MACHINERY. By R. H Rowland. E & M. J., vol. 90, p. 1067. 9½ columns. I.

A NEW MACHINE FOR USE IN ROOM-AND-PILLAR WORK. E. & M. J., vol. 86, p. 24. 2 columns. I

COAL CUTTING BY MACHINERY IN ENGLAND. By J. Hinton. E. & M. J., vol. 87, p. 649. 2½ columns.

MINING COAL WITH MACHINES IN ENGLAND. By G. R. Dixon E. & M. J., vol. 87, p. 797. 10 columns. I.

A COMPARISON OF COAL-CUTTING MACHINES. By S. F. Walker. E. & M. J., vol. 87, p. 1042. 13½ columns.

ENERGY OF THE BLOW IN A COAL PUNCHER. E. & M. J., vol. 87, p. 694. ½ column.

COAL CUTTING IN NORTHERN COAL FIELD, ENGLAND By G. R. Dixon. E. & M. J., vol 86, p. 1104. 5½ columns

COAL MINING MACHINES AND WELSH LABOR. E & M. J., vol 87, p. 897. 2½ columns

See also **MINE WORKMEN, AND LABOR TROUBLES, ETC**

DEVELOPMENT OF COAL MINING MACHINES By J. L. Wagner. M & M., vol 30, p. 349. 1½ columns

RECENT DEVELOPMENTS IN THE UNDERCUTTING OF COAL BY MACHINERY. By E. W. Parker. T. A. I. M. E., vol. 41, p. 677. 26 pages I

MACHINE MINING UNDER DIFFICULTIES By J. Gibson. T I M E., vol 37, p. 224. 10 pages. I.

WORKING AT THE FACE WITH A POST PUNCHER. E. & M. J., vol. 89, p. 1332. 1 column. I.

COAL PUNCHING MACHINES. E. & M. J., vol. 89, p. 623. 1½ columns.

USE OF THE "POST PUNCHER" IN UNDERCUTTING STEEP COAL BEDS. M. & M., vol 31, p. 77. 2 columns. I.

A NOVEL COAL AND STONE CUTTING PROCESS By A. Gradenwitz. E. & M. J., vol 87, p. 1236. 7½ columns. I.

See also **ELECTRIC COAL MINING MACHINES, BREAKING DOWN COAL AT THE FACE, and COST OF COAL MINING**

Electric Coal-Mining Machines

THE PNEUMOELECTRIC COAL PUNCHER. E. & M. J., vol 86, p. 580. 4½ columns. I.

See also **BREAKING DOWN COAL AT THE FACE, MINING MACHINES AT THE FACE, and COST OF COAL MINING.**

**Mechanical Mining Appliances:
Getters**

THE HYDRAULIC MINING CARTRIDGE
M. & M., vol. 30, p. 158 2 columns. I.

THE HYDRAULIC MINING CARTRIDGE.
By H. M. Payne M. & M., vol. 30,
p. 586. 2½ columns. I.

THE HYDRAULIC MINING CARTRIDGE.
E & M. J., vol. 88, p. 611 3 columns. I.

See also BREAKING DOWN COAL AT
THE FACE, MINING MACHINERY AT
THE FACE, and COST OF COAL MIN-
ING.

MINE SUPPORT**Mine Support: Conditions Affect-
ing, Etc.**

DATA OF PETRODYNAMICS. By R. D.
N. Hall. M & M., vol. 31, p. 505.
3½ columns.

DATA OF PETRODYNAMICS. By R. D.
N. Hall. M & M., vol. 31, p. 210.
2½ columns I

A SAFE WORKING ROCK COVER LIMIT:
Method of Calculation By F.
Lynde E. & M J., vol. 89, p. 1188.
4 columns. I.

THE DOME OF EQUILIBRIUM AND THE
CAVING SYSTEM OF MINING. By C.
T. Rice. Min. & Sci. Press, vol. 95,
p. 85 2½ columns.

See also THE CAVING SYSTEMS OF
MINING.

PRESSURE OF SUPERINCUMBENT STRATA
IN THE TRANSVAAL MINES. Min. &
Sci. Press, vol. 101, p. 333. 2 col-
umns.

ROCK PRESSURE AND METAMORPHISM.
By H. M. Chance. Min. & Sci.
Press, vol. 97, p. 299. 6 columns.

MINE SUPPORT TESTS IN THE ANTHRA-
CITE FIELDS, PENNSYLVANIA. M. &
M., vol. 31, p. 749. 5½ columns. I.

STEEL HAMMER AND PICK FOR TESTING
ROOF. M. & M., vol. 29, p. 79.
¼ column. I.

See also PROTECTION IN MINING.

SUPPORT OF THE SIDES OF LARGE
CHAMBERS IN LIGNITE MINES. M.
& M., vol. 29, p. 255. I.

MINE SUPPORT IN THE MINES OF
BOICZA, HUNGARY Min. & Sci.
Press, vol. 100, p. 34. ¼ column

DAMAGE TO SURFACE BUILDINGS
CAUSED BY UNDERGROUND WORK-
INGS. By W. Hay. T. I. M. E.,
vol. 36, p. 427. 9 pages. I.

See also SUBSIDENCE IN MINE WORK-
INGS.

SUPPORTING THE ROOF IN LONGWALL
WORKING IN ENGLAND E & M. J.,
vol. 85, p. 1146. 1 column. I.

See also LONGWALL MINING.

Kinds of Support, Timbers, Etc.

LUMBER: Kinds of Timber, Etc By
F. R. Babcock. P E Soc. W. Pa.,
vol. 26, p. 187. 16 pages.

EUCALYPTUS FOR MINE TIMBERS. By
A. H. Martin. Min. & Sci. Press,
vol. 97, p. 527, 1 column; p. 870,
2 columns.

MINING TIMBER, ITS USE AND PRESER-
VATION. By H. W. Ferd. T. Au.
I. M. E., vol. 5, p. 3. 4 pages

See also PRESERVATION OF MINE TIM-
BER

TIMBER AND MINE COSTS. Min. &
Sci. Press, vol. 96, p. 504. 1¼ col-
umns.

See also COST OF TIMBER.

SOME METHODS OF TIMBERING AND
WORKING WIDE LODES IN NEW
SOUTH WALES By J R Godfrey.
T. Au I. M. E., vol. 7, p. 193.
22 pages. I.

SAFE METHODS OF TIMBERING. T. Au.
I M. E., vol. 6, p. 25. 3 pages I.

See also PROTECTION IN MINING

SELECTION AND FRAMING OF TIMBER.

By W. L. Fleming E. & M. J., vol. 88, p. 423 $2\frac{1}{2}$ columns. I.

TIMBER CUTTING ON FOREST RESERVES FOR MINING PURPOSES E & M. J., vol. 87, p. 639. $\frac{1}{2}$ column.

HOW REFORESTATION MAY BE APPLIED TO THE MINE TIMBER INDUSTRY. By T. B. Wyman. T. L. S. M. I., vol. 14, p. 116 $13\frac{1}{2}$ pages. I.

USE OF TIMBER CRIBS IN THE AUSTRALIAN MINES T. A. I. M. E., vol. 7, p. 193. 20 pages. I.

TIMBER SUPPLY FOR MONTANA MINES. M. & M., vol. 29, p. 92. $1\frac{1}{2}$ columns.

REINFORCED CONCRETE MINE PROPS. E & M. J., vol. 89, p. 1076. 1 column

See also **USE OF CONCRETE IN MINES.**

STEEL SUPPORTS IN COAL MINES By R. B. Woodworth M. & M., vol. 31, p. 387. 7 columns. I.

See also **STRENGTH OF TIMBER, MASONRY, ETC., and COST OF SUPPORT.**

Strength of Timber, Masonry, Coal and Iron for Mine Support

THE STRENGTH OF MINE ROOFS By R. D. N. Hall. M & M, vol. 30, p. 474. 3 columns. I.

APPLICATION OF STEEL TO MINE TIMBERING. By R. B. Woodworth. Min & Sci. Press, vol. 99, p. 462. 10 columns.

PILLARS IN TREADWELL MINES. Min. & Sci. Press, vol. 97, p. 85. $\frac{1}{2}$ column. I.

SOME GERMAN MINE PROPS: Adjustable Forms. E & M. J., vol. 88, p. 413. 5 columns. I.

ADJUSTABLE MINE SUPPORT E. & M. J., vol. 86, p. 1260. $\frac{1}{2}$ column. I.

PACKWALLS AND PIGSTIES FOR SUPPORT ON THE RAND. P. C. M. & M. Soc. S. A., vol. 10, p. 277 $2\frac{1}{2}$ columns. I.

Subsidence in Mine Workings

DAMAGE TO SURFACE BUILDINGS CAUSED BY UNDERGROUND WORKINGS. By W. Hay. T. I. M. E., vol. 36, p. 427. 9 pages. I

SCRANTON MINE CAVE INQUIRY. M. & M, vol. 31, p. 620. 2 columns.

CONTINUED TROUBLE OVER ANTHRACITE MINE CAVE-INS E & M. J., vol. 89, p. 580 1 column.

THE PROTECTION OF THE SURFACE ABOVE ANTHRACITE MINES. E & M. J., vol. 89, p. 167. $1\frac{1}{2}$ columns

SURFACE EFFECTS OF THE CAVING SYSTEM By L. Eaton Min & Sci. Press, vol. 97, p. 428. $2\frac{1}{2}$ columns.

SURFACE PROTECTION OVER COAL MINES. M. & M, vol. 30, p. 568. 3 columns.

CAVES IN THE JOPLIN LEAD AND ZINC REGION, MISSOURI T. A. I. M. E., vol. 38, p. 331. 2 pages.

MINE SUBSIDENCE By A. Richardson. P. C. M. & M. Soc. S. A., vol. 7, p. 279, 19 columns, I; p. 325, 9 columns; p. 362, 10 column; vol. 8, p. 16, $3\frac{1}{2}$ columns; p. 46, 10 columns.

SURFACE AND UNDERGROUND SUBSIDENCE IN COAL MINING T. I. M. E., vol. 37, p. 691. $\frac{1}{2}$ page

UNWATERING OF STRATA AND SUBSIDENCES IN THE RENISH-WESTPHALIAN COAL FIELD. T. I. M. E., vol. 37, p. 691. 1 page.

SLIPS AND SUBSIDENCES. Earthwork and Its Cost, Chap 18, p. 184.

SUBSIDENCE IN UNDERGROUND MINES. By A. Richardson. E & M. J., vol. 84, p. 196. $10\frac{1}{2}$ columns. I.

THE EFFECT PRODUCED UPON BEDS OF COAL BY WORKING AWAY THE OVER- OR UNDERLYING SEAMS. By G. Elliot Min. Mag, vol. 9, p. 333. $4\frac{1}{2}$ pages.

See also **PROTECTION IN MINING, and MINE SUPPORT: CONDITIONS AFFECTING.**

Size of Pillars, Barrier Pillars, Etc.

BARRIER PILLARS, "SENZIE" WALLS, WEMYSS COAL FIELDS, ENGLAND.

T. I. M. E., vol. 36, p. 563. Note.

SIZE OF ROOMS AND PILLARS. E. & M. J., vol. 90, p. 871. Table.

SIZE OF PILLARS TO BE LEFT IN MINES. M. & M., vol. 29, p. 375. $\frac{1}{2}$ column.

STRENGTH OF PILLARS P. C. M. & M. Soc. S. A., vol. 8, p. 49. $1\frac{1}{2}$ columns.

COLLAPSE OF SHAFT PILLARS. P. C. M. & M. Soc. S. A., vol. 10, p. 279. 1 column

FAILURE OF MINE PILLARS P. C. M. & M. Soc. S. A., vol. 8, p. 50 1 column.

USE OF PILLARS IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 279. $\frac{1}{2}$ column I.

See also **STRENGTH OF TIMBER, ETC.**

Methods of Timbering

ON TIMBERING MINES Min Mag, vol. 9, p. 330 $2\frac{1}{2}$ pages.

EXAMPLES OF MINE TIMBERING. By W. H. Vale T. Au. I. M. E., vol. 8, pt. 2, p. 268. 8 pages. I.

TIMBERING AND ITS IMPORTANCE IN MAKING ESTIMATES OF COST. By R. James. T. Au. I. M. E., vol. 7, p. 84. 10 pages.

USE OF PROPS IN THE RAND MINES. P. C. M. & M. Soc. S. A., vol. 10, p. 278. 1 column. I.

TAPERED TIMBER PROPS. P. C. M. & M. Soc. S. A., vol. 9, p. 369. $1\frac{1}{2}$ columns.

TAPERED TIMBER. By P. Horan. T. I. M. E., vol. 37, p. 135. 12 pages. I.

REINFORCED TIMBER CAP E. & M. J., vol. 86, p. 427. $\frac{1}{2}$ column I.

COMBINATION OF STEEL AND WOOD MINE TIMBERS. E. & M. J., vol. 90, p. 1293. 1 column. I.

DRAWING TIMBERS IN THICK COAL. SEAM WORKING E. & M. J., vol. 86, p. 15. 2 columns

MINE TIMBERING IN FRANCE. E. & M. J., vol. 88, p. 1172. 1 column. I.

SADDLE-BACK STULLS Min. & Sci. Press, vol. 96, p. 782. $\frac{1}{2}$ column. I.

"SADDLE-BACK" TIMBERING IN AUSTRALIAN MINES T. I. M. & M., vol. 18, p. 293. 1 page. I

See also **TUNNEL SUPPORT.**

STOPE TIMBERING M. & M., vol. 31, p. 29 $\frac{1}{2}$ column

STULL-SETS FOR WIDE LODES T. I. M. & M., vol. 18, p. 308 2 pages. I.

NOTES ON PLACING AND CUTTING STULLS E. & M. J., vol. 88, p. 572. 2 columns. I.

TIMBERING WIDE STOPES. E. & M. J., vol. 88, p. 376 1 column. I.

METHODS OF TIMBERING IN STOPES, THE MOUNT MORGAN MINE. E. & M. J., vol. 87, p. 638. 1 column I.

See also **METHODS OF STOPING.**

RETIMBERING OF THE KEARSARGE SHAFT. By L. Fraser Min. & Sci. Press, vol. 95, p. 432. $2\frac{1}{2}$ columns. I.

A METHOD FOR SETTING TIMBER IN INCLINED SHAFTS. By C. W. McDougall. E. & M. J., vol. 87, p. 656. $2\frac{1}{2}$ columns. I.

See also **SHAFT LINING.**

TIMBERING IN THE JOPLIN DISTRICT. By L. L. Wittich. M. & M., vol. 31, p. 144. 4 columns. I

METHOD OF TIMBERING IN THE PILGRIM'S REST MINES. P. C. M. & M. Soc. S. A., vol. 9, p. 297. 1 column. I.

A METHOD OF TIMBERING AT THE MOUNT REX TIN MINE, BEN LOMOND, TASMANIA. By Mark Ireland. T. Au. I. M. E., vol. 10, p. 261. 1 page.

METHODS OF TIMBERING EMPLOYED AT THE BROKEN HILL MINES, NEW SOUTH WALES. E. & M. J., vol. 86, p. 799. 1 column. I.

- METHOD OF TIMBERING IN THE CARMAUX COAL MINES OF FRANCE** E. & M. J., vol 86, p. 577 2 columns. I.
- MASONRY AND TIMBERING IN BELGIAN MINES.** E & M. J., vol 88, p. 1172. Note. I
- TIMBERING WORKING PLACES IN THE PITCHING SEAMS, HAZLETON DISTRICT.** Coal Mining Supplement, E. & M. J., vol 88, p 27. 1 column. I
- TIMBERING IN INDIAN COAL MINES.** M. & M., vol 31, p. 179. $\frac{1}{2}$ column I
- TIMBERING ROOMS IN GERMANY.** E. & M. J., vol 88, p. 1172. $\frac{1}{2}$ column. I.
- FOREPOLING IN THE ANTHRACITE MINES.** E. & M J, vol 86, p. 477. 1 column
- FOREPOLING IN HEAVY GROUND.** E. & M. J, vol. 88, p. 375. 2 columns. I.
- FALSE SET FOR SPILING GROUND.** By J. Humes. E. & M J, vol 89, p. 698 $3\frac{1}{2}$ columns. I.
- See also **SHAFT SINKING, and METHODS OF TUNNELING.**
- CORNISH METHODS OF MINING: Timbering.** By G. P. Chaplin T. F. I. M. E., vol 13, p. 200. 10 pages. I.
- See also **USE OF CONCRETE IN MINES, and COST OF SUPPORT**
- Tunnel Support**
- METHOD OF TIMBERING EMPLOYED IN THE HOSMER MINES, TUNNEL** J. C. M. I., vol. 13, pp. 238 and 239. I.
- TIMBERING OF DRIFTS IN THE ESPERANZA MINE, EL ORO, MEXICO.** Min. & Sci. Press, vol. 99, p. 822. $1\frac{1}{2}$ columns. I.
- DRIFT TIMBERING FOR HEAVY GROUND.** E. & M. J., vol. 89, p 1101 1 column. I.
- EUROPEAN METHODS OF ENTRY TIMBERING.** By H. M. Payne. E. & M J, vol 88, p. 1172. $2\frac{1}{2}$ columns. I.
- TIMBERING A SLOPE: Anthracite Mines of Pennsylvania** Coal Mining Supplement, E. & M. J., vol. 88, p. 25. 2 columns I.
- LINING THE LOS ANGELES TUNNEL WITH CONCRETE** Min. & Sci Press, vol. 100, p 682. 1 column
- THE USE OF STEEL SUPPORTS IN COAL MINES.** By R. B. Woodworth. E & M J, vol. 85, p. 602. 7 columns. I.
- SPECIAL FORMS OF STEEL FOR MINE SUPPORT** P E Soc. W Pa., vol 24, p. 40. 50 pages. I.
- STEEL SUPPORTS FOR MINE DRIFTS.** By R B Woodworth E & M. J, vol. 85, p. 1196 3 columns. I
- INTERLOCKING STEEL MINE SUPPORTS: Particularly Mine Sets for Entries.** M. & M., vol. 31, p. 664. $1\frac{1}{2}$ columns I.
- See also **USE OF CONCRETE IN MINES, and KINDS OF SUPPORT, TIMBER, ETC.**
- See also **COST OF MINE AND MILL CONSTRUCTION**
- Shaft Lining: Timbering, Tubbing, Cementation, Etc.**
- METHODS OF SHAFT TIMBERING AT THE SUPERIOR AND BOSTON MINE, ARIZONA.** M. & M., vol. 31, p 114. 1 column. I.
- TIMBERING OF A SIX-COMPARTMENT SHAFT.** T. A. I. M. E., vol 41, pp. 537, 538 and 539. I.
- SHAFT TIMBERING: The Giroux Shaft, Kimberly, Nevada.** E. & M. J., vol. 89, p. 1325. 5 columns. I.
- TIMBERING IN THE CLONAN SHAFT, MINEVILLE, NEW YORK.** E. & M. J., vol. 85, p. 111. 1 column. I.
- METHOD OF TIMBERING THE ALLAN SHAFTS NEAR STELLARTON, NOVA SCOTIA.** J M Soc. N. S., vol. 12, p 17. 1 page I.

**COLLAR AT NO 1 ALLAN SHAFT, STEEL-
LARTON, NOVA SCOTIA.** By H E
Coll J M. Soc. N. S., vol. 13, p. 69.
6 pages.

**SETTING OUT INCLINED SHAFT TIM-
BERS** By D J Browne. J C M.
I., vol. 13, p. 455. 9 pages. I.

**LINING-UP TIMBERS IN INCLINED
SHAFTS.** By B J Case. E & M
J., vol. 86, p. 612 3½ columns. I

**RECLAIMING THE INCLINED HOISTWAY
AT MINE 21, MINEVILLE, NEW YORK.**
By G C. Stoltz E & M J,
vol. 87, p. 600 5 columns. I

**STEEL SHAFT SETS ON THE MESABI
RANGE** By F. A Kennedy. E &
M. J., vol. 89, p. 206. 1 column. I.

STEEL FORMS FOR SHAFT LINING
Min. & Sci. Press, vol. 100, p. 529.
½ column.

**SHAFT TIMBERING BRAKPAN, TRANS-
VAAL, SOUTH AFRICA.** By E M.
Weston. E. & M. J., vol 85, p 551.
5 columns. I.

**UNDERGROUND STEEL CONSTRUCTIONS:
Particularly Mine Shafts** By R. B.
Woodworth T L S M. I., vol 15,
p. 45. 55 pages I.

STEEL MINE SHAFT CONSTRUCTION.
By R. B. Woodworth. M. & M.,
vol. 31, p. 516. 10½ columns. I.

**AN IMPROVED SWINGING STAGE: Shaft
Lining Device.** E. & M J, vol. 86,
p 217. 1 column. I.

GUIDING A DROP-SHAFT E & M. J.,
vol 90, p. 498. 2 columns. I.

See also **SHAFT SINKING.**

**AN ACCOUNT OF THE METHOD EM-
PLOYED IN STOPPING AN EXTENSIVE
LEAK, UNDER HIGH PRESSURE, IN
THE TUBBING OF THE EAST PIT,
MURTON COLLIERY, 1907.** By W.
O Wood. T. I. M E., vol 38,
p. 568 8½ pages. I.

REPAIRING A CAST-IRON SHAFT LINING
E & M J, vol. 88, p. 1185. 1½ col-
umns. I.

See also **USE OF CONCRETE IN MINES,
and KINDS OF SUPPORT, TIMBER, ETC.**

See also **COST OF MINE AND MILL
CONSTRUCTION, COST OF SHAFT
SINKING, and COST OF SUPPORT.**

Square-Set Timbering

THE PORTLAND SQUARE-SET SYSTEM.
E. & M J, vol. 85, p 102. 3 col-
umns. I.

LEANING STOPE SETS. E. & M J.,
vol 90, p. 8 1½ columns. I.

**PLACING SILLS BENEATH SQUARE-SETS
ALREADY IN PLACE** E & M. J.,
vol 90, p. 501 2½ columns. I.

**SQUARE-SETTING IN THE CLIFTON-
MORENCI MINES.** Min & Sci.
Press, vol 101, p. 832 2½ col-
umns. I.

**SQUARE-SET MINING OR A MODIFICA-
TION OF IT.** By C. T. Rice Min.
& Sci. Press, vol. 95, p 365. 5 col-
umns. I.

**SQUARE-SET MINING IN THE TAMA-
RACK MINES.** Min. & Sci. Press,
vol 96, p. 848. Note.

SQUARE-SET MINING AT CANANEA.
E & M. J., vol. 90, p. 915. 1 col-
umn

**SQUARE-SET TIMBERING AT THE MOUNT
MORGAN MINE** E & M J, vol.
87, p. 749. 1 column. I.

**TIMBERING IN THE TINTIC DISTRICT,
UTAH** Square-Sets. M & M.,
vol 31, p 555. 1 column. I

SQUARE-SETS AT BISBEE, ARIZONA.
Min. & Sci. Press, vol. 99, p. 360.
½ column.

**THE CANANEA METHOD OF FRAMING
SQUARE-SETS.** E. & M J., vol. 90,
p. 916. ½ column. I.

**SQUARE-SETS USED IN THE ESPERANZA
MINE, MEXICO** Min & Sci Press,
vol. 99, p. 847. ½ column.

**SQUARE-SETS IN THE CENTRE STAR
MINES, BRITISH COLUMBIA.** E. &
M. J., vol. 89, p. 18. 1½ columns. I.

**METHOD OF SQUARE-SET STOPING AT
BISBEE.** By M. J. Elsing. E. &
M. J., vol. 89, p. 707. 7 columns. I.

See also METHODS OF STOPING.

See also METHODS OF MINING GENERAL AND MISCELLANEOUS and COST OF SUPPORT

Preservation of Mine Timber and Structural Steel

WOOD PRESERVATION FROM AN ENGINEERING STANDPOINT. By C. T. Barnum J. W. Soc. E., vol 15, p 346. 20 pages. I

THE EFFECT OF MOISTURE ON WOOD. P. C. M. & M Soc. S. A., vol. 7, p. 353. 2 columns.

OPEN-TANK METHOD OF PRESERVING TIMBER By H. F. Weiss E. & M. J., vol. 87, p. 840. 3½ columns.

CREOSOTE AS A TIMBER PRESERVATIVE E & M. J., vol. 90, p 1295. 2 columns.

WOOD PRESERVATION WITH SPECIAL REFERENCE TO MINE TIMBERS. By J M. Nelson. T. L. S. M. I., vol 14, p. 99. 18 pages. I.

PROLONGING THE LIFE OF MINE TIMBERS. By J W. Nelson. Min. & Sci Press, vol. 95, p. 816. 6 columns. I.

PRESERVATION OF MINE TIMBERS. M. & M., vol. 29, p. 342. ½ column.

PROLONGING THE LIFE OF MINE TIMBERS By J. M. Nelson M. & M., vol. 29, p. 137. 9 columns.

PRESERVATION OF MINE TIMBERS. By C A. Chase. E & M J., vol. 89, p. 453. ½ column.

PRESERVATION OF TIMBER By F H. Mason. Min. & Sci. Press, vol. 97, p. 837. 9½ columns. I.

THE PRESERVATION OF MINE TIMBERS. By J. M. Nelson. E. & M. J., vol. 88, p. 211. 4 columns. I.

PRESERVATION OF MINE TIMBERS FROM DECAY. P. C. M. & M. Soc. S. A., vol. 8, p. 28. 1½ columns.

THE PRESERVATIVE TREATMENT OF WOODS. P. C. M. & M Soc S A., vol. 5, p 68. ½ column

COAL TAR AND ITS PRODUCTS AS PRESERVATIVES FOR WOOD Min & Sci. Press, vol 20, p 10 2 columns.

THE PROTECTION OF MINE TIMBERS FROM FUNGUS. By J. Macoun. J. C. M. I., vol. 13, p. 467. 3 pages.

THE PRESERVATION OF STRUCTURAL TIMBERS FROM DECAY. By C. P. Winslow. P. E. Soc. W. Pa., vol. 26, p. 427. 58 pages. I.

See also KINDS OF SUPPORT, TIMBER, ETC.

PROTECTIVE COATINGS FOR STRUCTURAL MATERIALS. By R. S. Perry. J. W. Soc. E., vol. 14, p 399. 19 pages.

RUSTING OF IRON. By F. H. Mason. Min & Sci. Press, vol. 97, p. 329. 2½ columns.

RUST PREVENTIVE. Min. & Sci. Press, vol 95, p. 593. ½ column

PREVENTION OF RUSTING. Min & Sci Press, vol. 96, p. 704. ¼ column.

RELATIVE CORROSION OF STEEL AND WROUGHT IRON TUBING. By H. M. Howe and B. Stoughton. E. & M. J., vol. 86, p. 563. 4½ columns.

CORROSION OF STEEL AND IRON TUBING. E & M. J., vol. 86, p. 821. 3 columns.

CORROSION OF IRON AND STEEL. By A. Sang. P. E. Soc. W. Pa., vol. 24, p. 493. 68 pages. I.

COST OF OPEN-TANK PLANTS FOR PRESERVING TIMBER. E. & M. J., vol. 87, p. 840 1 column.

See also COST OF PRESERVATION OF MINE TIMBER and COST OF MINE SUPPORT

PHOTOGRAPHY FOR MINES AND TECHNICAL WORK

PHOTOGRAPHY IN MINING. By T. R. Archbald. Min & Sci. Press, vol 99, p. 431. 1½ columns. I.

THE PANORAMIC CAMERA APPLIED TO PHOTO-TOPOGRAPHY By C W. Wright. T A I M. E., vol 38, p. 482. 15½ pages. I.

PHOTOGRAPHY IN MINING By J. B. Lanfield. Min. & Sci Press, vol. 98, p. 894. 2 columns.

MODERN PRACTISE IN COLOR PHOTOGRAPHY. By A. N Goldsmith. Sch. Mines Quart , vol. 30, p. 130. 8 pages

POWER: STEAM, WATER, ELECTRICITY AND GAS

General Application of Power

POWER IN ITS RELATION TO THE INDUSTRIES By C E. Lucke. Sch. Mines Quart., vol. 31, p. 246 21 pages. I

POWER PLANT ECONOMICS AS APPLIED TO MINING By H. Jalowick. E. & M. J, vol. 88, p. 1067 3½ columns. I.

ECONOMY OF POWER IN CRUSHING ORE By E. A. Hersam. Min. & Sci. Press, vol. 95, p. 621. 12 columns.

See also the REDUCTION OF ORES, ETC

POWER REQUIRED FOR STAMP BATTERIES. E. & M. J., vol. 89, p. 258. 1 column. D.

See also STAMP MILL PRACTICE

POWER FOR CONCENTRATING MILL. By F C. Bowman M & M, vol. 31, p 19 1½ columns Tables.

See also CONCENTRATION.

POWER REQUIRED FOR CONCENTRATING MACHINES Min. & Sci Press, vol. 101, p. 304 Table.

POWER USED IN MINING. By E. O'Toole. M & M, vol. 31, p 86. 5½ columns I

POWER PRODUCTION AT COLLIERIES. M. & M., vol. 31, p 33, 1½ columns; p 180, 4 columns, I.

POWER SYSTEMS OF THE MINES OF THE JOPLIN DISTRICT. By D. F. Boardman. E. & M. J, vol. 86, p. 327. 7½ columns.

See also ELECTRICITY IN THE MINE, and GAS FOR POWER

EXHAUST-STEAM TURBINES AT LANCASHIRE COLLIERIES. By G H J Hooghwinkel. T I M E, vol 37, p. 176 12 pages

THE RECOVERY OF POWER FROM EXHAUST STEAM By W M. Sander-son T I. M. E., vol 38, p. 282 27 pages. I

RELATION OF LOAD FACTOR TO POWER COSTS By E. W Lloyd, C. A S Howlett and J. M S Waring. J. W. Soc E, vol. 14, p 241. 21½ pages. D.

See also COST OF POWER.

THE LAW OF CONSERVATION OF ENERGY. By C. P. Steinmetz. J. W. Soc. E, vol 15, p 80. 12 pages. I.

ANALYSIS OF PROPOSED CHANGE IN POWER CONTRACT. By R Sibley E & M J., vol. 87, p. 794 7 columns D.

ELECTRIC DRIVE IN FOUNDRIES AND WORKS By H. A. Carter Min & Sci. Press, vol 100, p. 215 7 columns.

See also POWER TRANSMISSION, ETC.

See also FINE CRUSHING BY MILLS

Steam Boilers and Power Plants

STEAM BOILERS. A Few Hints as to Proper Management. By E. P. Lee. T. Au. I. M. E., vol 8, pt. 1, p. 97. 6 pages.

METHODS OF STUDYING THE HEAT-ABSORBING PROPERTIES OF STEAM BOILERS. By L R. Stowe J. W. Soc. E., vol. 13, p. 715. 31½ pages. D.

SOME RESULTS DUE TO IMPROVEMENT IN BOILER AND FURNACE DESIGN By A. Bement. J W Soc. E., vol. 13, p. 209. 74 pages. I

THE NATURE OF TRUE BOILER EFFICIENCY. By W T Ray and H. Kreisinger. J W Soc E, vol 12, p. 661. 40 pages. I

A NEW TYPE OF WATER TUBE BOILER. By T. H. McGraw, Jr P. E Soc W Pa., vol 25, p 491 13 pages I.

THE CARE OF SMALL STEAM BOILERS. By W. O. Rogers. E & M J, vol. 88, p. 1217. 7½ columns I.

SIGNIFICANCE OF DRAFTS IN STEAM-BOILER PRACTICE By W. T Ray and H. Kreisinger U. S. G. S., Bull. 367. 61 pages 1909

CONDENSATION IN STEAM PIPES E. & M J., vol. 88, p. 512. 1 column. D.

A REVIEW OF THE UNITED STATES GEOLOGICAL SURVEY FUEL TESTS UNDER STEAM BOILERS By L. P. Breckenridge. J. W. Soc E., vol. 12, p. 285. 64 pages I.

THE BURNING OF COAL WITHOUT SMOKE IN BOILER PLANTS By D T Randall U. S. G. S, Bull 334 26 pages. 1908

USE OF LOW-GRADE FUEL UNDER BOILERS. By J Preston. J. M. Soc N. S., vol. 15, p. 103. 5 pages.

See also **TESTING FUELS AND THEIR VALUE, and COST OF POWER.**

Steam Engine Calculations, Tests and Horse-Power

See also first volume of INDEX

Gas and Oil Engines

GAS ENGINES FOR MINING PURPOSES. By A. S. Atkinson. Min. & Sci. Press, vol. 99, p. 300. 3½ columns.

THE LARGEST COKE OVEN GAS ENGINE PLANT By J. B Van Brussel. E & M J, vol. 87, p. 1189. 5 columns. I

GAS ENGINES' Steel Plant Practice. By M. B. Lamb Min & Sci Press, vol 99, p. 459. 5 columns I.

GAS AND GASOLINE ENGINES AS APPLIED TO SMALL WATER WORKS PLANTS By C O. Rogers. P. E. Soc. W. Pa., vol 14, p. 85. 16 pages I

CARBURETORS FOR GAS ENGINES AT MINES By E. N Percy Min & Sci Press, vol. 99, p 687. 2 columns.

See also first volume of INDEX and COST OF POWER.

Horse Power Tests and Calculations of Boilers

EVAPORATIVE TESTS OF STEAM BOILERS By W. Kent. P E Soc. W. Pa., vol. 2, p. 221 24 columns.

See also first column of INDEX

Superheated and Wet Steam

SUPERHEATED STEAM FOR WINDING ENGINES. E. & M J., vol. 87, p 467. 2½ columns

See also first volume of INDEX

Boiler Feedwater

BOILER FEEDWATER AND ITS TREATMENT By J. R. Campbell. M. & M., vol. 29, p. 297. 4½ columns. I.

THE SELECTION OF A BOILER FEEDWATER. By J C W Greth. P. E. Soc. W. Pa., vol. 26, p 121 38 pages. D.

TREATMENT OF BOILER WATER. By A. L. McCallum. J. M. Soc. N. S., vol. 15, p. 79. 3 pages.

WATER SOFTENERS FOR BOILER FEEDWATER M. & M., vol 29, p 298 ½ column.

COOLING TOWERS FOR HOT WATER. By S. K. Patteson Min. & Sci. Press, vol. 98, p. 668. 1½ columns.

CAPACITY OF BOILER FEED-PUMPS.

By W. B. Osborn. M. & M., vol. 30, p. 144. 1½ columns.

Condensers for Steam

THE SURFACE CONDENSER IN MINING POWER PLANTS By W. A. Macleod. T. I. M. & M., vol. 19, p. 332. 66 pages I.

THE SURFACE CONDENSER IN MINE POWER PLANTS By W. A. Macleod. E. & M. J., vol. 90, p. 124. 8½ columns

See also first volume of INDEX.

Feedwater Heaters for Boilers

THE ORGAN FEEDWATER HEATER. M. & M., vol. 31, p. 371. 2½ columns I

See also first volume of INDEX.

Mechanical Feeders for Steam Boilers

MECHANICAL STOKERS AND HAND FIRING. M. & M., vol. 31, p. 42 3 columns Tables.

See also first volume of INDEX and COST OF POWER.

The Central Power Plant

CENTRAL STATION DESIGN. By A. A. Radtke. P. Soc. P. E. E., vol. 15, p. 156. 12 pages.

A CENTRAL POWER PLANT FOR ANTHRACITE MINES E. & M. J., vol. 86, p. 817. 1½ columns.

CENTRAL STATION ECONOMIES. By W. L. Abbott. J. W. Soc. E., vol. 15, p. 41 16 pages I.

POWER-STATION OF THE DE BEERS CONSOLIDATED MINES, LTD, KIMBERLEY, SOUTH AFRICA. By P. A. Robbins. T. A. I. M. E., vol. 39, p. 177. 33½ pages I

WINDBER POWER PLANTS, PENNSYLVANIA. M. & M., vol. 30, p. 457 6 columns. I

GREAT FALLS, MONTANA M. & M., vol. 29, p. 350. 3½ columns. I.

Steam Pipes and Coverings

STEAM PIPE COVERING IN A WET SHAFT. By E. P. Kennedy. Min. & Sci. Press, vol. 97, p. 89. ½ column

SUPPORTING ROLLER FOR OUTDOOR STEAM LINE. E. & M. J., vol. 89, p. 1215. ½ column. I.

See also first volume of INDEX

Scale and Boiler Compounds

See first volume of INDEX

Consumption and Waste of Coal and Steam

COMBUSTION OF COAL IN BOILERS. M. & M., vol. 31, p. 492 1½ columns

STEAM WASTE AT MINES. M. & M., vol. 30, p. 315 1½ columns.

Valves and Valve-Gear for Steam Engines

See first volume of INDEX.

Water Power Plants: Theory and Practice

HYDRO-ELECTRIC POWER FORMULAE. By J. H. Wise. Min. & Sci. Press, vol. 101, p. 84. ¼ column.

WATER AS A MOTIVE POWER UNDER GROUND E. & M. J., vol. 86, p. 1211. 1½ columns I

USING MINE WATER AS MOTIVE POWER By D. T. Pierce. E. & M. J., vol. 88, p. 5 1½ columns I.

See also WATER WHEELS, ETC., and first volume of INDEX

Water Wheels, Governors, Data, Etc.

THE EFFECTIVE HORSE-POWER OF AN HYDRAULIC TURBINE Min. & Sci. Press, vol. 98, p. 450. ½ column

HYDRAULIC DIAGRAMS By S. D. Bleich. Sch. Mines Quart., vol. 30, p. 33 7 pages. D.

A WATER WHEEL GOVERNOR AND ITS OPERATION. By D. B. Riplogle. Min. & Sci. Press, vol. 97, p. 331. 3½ columns. I.

SPEED REGULATION OF HIGH-HEAD WATER WHEELS. By H. S. Knowlton. E. & M. J., vol. 85, p. 362. 4½ columns.

See also **WATER POWER PLANTS, ETC.**, and first volume of **INDEX**.

The Electric Power Plant and Its Equipment

THE REGULATION OF COLLIERY ELECTRICAL POWER STATION SUPPLY, WITH SPECIAL REFERENCE TO THE TERRILL REGULATOR. By E. Gar-ton. T. I. M. E., vol. 37, p. 61. 20 pages. I. D

THE UTILIZATION OF ANTHRACITE COAL FOR THE GENERATION OF ELECTRICITY. By J. Clark. E. & M. J., vol. 88, p. 1175. 1½ columns.

THE ELECTRICAL EQUIPMENT OF GOLD MINES. By H. J. S. Heather. T. I. M. & M., vol. 17, p. 378, 48 pages, I.; p. 444, 19 pages, I., p. 528, 3½ pages.

HYDRO-ELECTRIC POWER PLANTS IN CANADA. T. I. M. & M., vol. 18, p. 191. 4 pages.

See also **WATER POWER PLANTS**

A STORAGE BATTERY EXTENSION TO A THREE-PHASE COLLIERY POWER-PLANT By W. Maurice. T. I. M. E., vol. 39, p. 601. 17 pages. I.

THREE-WIRE MINE SERVICE. By J. M. Hunt. M. & M., vol. 31, p. 402. 4½ columns. I.

DIRECT CURRENT MOTORS. By W. B. Clarke. M. & M., vol. 29, p. 88, 7 columns, I.; p. 112, 4 columns, I.

ELECTRIC POWER FOR CEMENT PLANTS. By J. B. Porter. E. & M. J., vol. 86, p. 80. 1½ columns.

HEATING OF CONDUCTORS BY ELECTRIC CURRENTS By S. F. Walker. E. & M. J., vol. 86, p. 177. 2 columns.

NOVEL AUTOMATIC SWITCH By C. S. Beach. M. & M., vol. 30, p. 566. 2½ columns. I.

A USEFUL BANK OF LAMPS By L. E. Brown. E. & M. J., vol. 89, p. 859. 2 columns. I.

EXPLOSIONS IN SWITCH BOXES By S. F. Walker. E. & M. J., vol. 88, p. 166. 1½ columns.

See also **CAUSE OF ACCIDENTS, ELECTRICITY IN THE MINES, THE ELECTRIC POWER PLANT, ETC.**, and **COST OF POWER**.

Electricity in the Mine

THE ABC OF ELECTRICITY IN MINES. M. & M., vol. 31, p. 692. 2 columns.

ELECTRICITY IN MINING. By W. C. Wagner. M. & M., vol. 31, p. 756. 6 columns. I.

MODERN APPLICATIONS OF ELECTRICITY TO MINES P. C. M. & M. Soc. S. A., vol. 8, p. 95. 1½ columns.

SAFE USE OF ELECTRICITY IN MINES. By G. R. Wood. M. & M., vol. 30, p. 33. 5 columns.

APPLICATION OF ELECTRICITY IN MINES. By G. Harrison. M. & M., vol. 30, p. 164. 2½ columns.

ELECTRICITY IN MINES By T. J. McKavanagh. J. M. Soc. N. S., vol. 13, p. 75. 8 pages.

REGULATING THE USE OF ELECTRICITY IN MINES. M. & M., vol. 29, p. 329. 12½ columns.

See also **MINE REGULATIONS**.

REMARKS ON SPECIAL RULES FOR THE INSTALLATION AND USE OF ELECTRICITY IN MINES. By E. E. Baker. T. I. M. E., vol. 39, p. 328. 20 pages.

ELECTRICAL WIRING FOR DEEP MINING WORK. By C. L. C. Fichtel. E. & M. J., vol. 88, p. 516. 5½ columns. I.

ELECTRICAL WIRING FOR DEEP MINING WORK. E. & M. J., vol. 88, p. 837. 2 columns.

- TROLLEY WIRE SUPPORT FOR MINES. M. & M, vol. 31, p. 32. 1½ columns. I
- ELECTRICAL EQUIPMENT OF THE BUTTE BALAKLAVA MINE By A. F. Bushnell. E. & M. J., vol. 86, p. 714. 2½ columns. I
- THE USES OF ELECTRICITY IN MINING WITH SPECIAL REFERENCE TO THE ELECTRICAL OPERATIONS AT MOUNT MORGAN. By E. H. Hewlett. T. A. I. M. E., vol. 6, p. 226. 21 pages. D.
- THE ELECTRICAL EQUIPMENT OF GOLD MINES By H. J. S. Heather. T. I. M. & M., vol. 17, p. 378, 48 pages, I.; p. 444, 19 pages, I.; p. 528, 3½ pages.
- ELECTRIC POWER AT THE CLAUSTHAL MINES By A. Gradenwitz. E. & M. J., vol. 85, p. 1129. 10½ columns.
- ELECTRICAL POWER AT MEXICAN MINES AND MILLS. By C. V. Allen. E. & M. J., vol. 88, p. 690. 7 columns. I.
- ELECTRICITY IN COAL MINES. By R. Nelson. T. I. M. E., vol. 37, p. 459, 55 pages, I.; p. 514, 22½ pages.
- ELECTRICITY IN MODERN COAL MINING. By H. J. Nelms. E. & M. J., vol. 86, p. 1106. 2½ columns.
- ELECTRICAL POWER GENERATION AND DISTRIBUTION AT THE COLLIERIES OF THE LOCHGELLY IRON AND COAL COMPANY, LIMITED, FIFE By J. Paul. T. I. M. E., vol. 37, p. 364. 19 pages. I.
- DEVELOPMENT OF ELECTRIC POWER IN COAL MINES. By G. E. Walsh. E. & M. J., vol. 86, p. 1011. 4½ columns.
- EARTHED AND INSULATED NEUTRALS IN COLLIERY WORK. E. & M. J., vol. 90, p. 275. 4 columns. I.
- ELECTRICITY IN THE COAL MINING INDUSTRY P. C. M. & M. Soc. S. A., vol. 10, p. 334. 3 columns.
- COAL MINE EQUIPMENT. By W. S. Meyers. M. & M., vol. 30, p. 731. 4 columns.
- ELECTRICITY AND COAL MINING By F. C. Albright. M. & M., vol. 30, p. 342. 7½ columns.
- ELECTRICITY IN COAL MINES. By W. M. Thornton. E. & M. J., vol. 89, p. 1238. 3 columns.
- THE INSTALLATION OF ELECTRIC POWER IN COAL MINES. By W. A. Thomas. E. & M. J., vol. 87, p. 510. 1½ columns. I
- THE USE OF ELECTRICITY AS APPLIED TO COAL MINING By W. B. Spellmire. E. & M. J., vol. 87, p. 507. 4½ columns. I.
- IS THE ELECTRIC CURRENT SAFE IN COAL MINES? By R. N. Hosler. E. & M. J., vol. 86, p. 29. 7 columns.
- THE SAFE USE OF ELECTRICITY IN COAL MINING By S. F. Walker. E. & M. J., vol. 88, p. 877. 4 columns
- See also CAUSES OF ACCIDENTS and PROTECTION IN MINING
- THE ELECTRICAL AND COAL MINING INDUSTRIES By F. C. Albrecht. E. & M. J., vol. 88, p. 163. 5 columns.
- ELECTRICITY IN ANTHRACITE MINING By H. M. Warren. Coal Mining Supplement, E. & M. J., vol. 88, p. 19. 3½ columns.
- ELECTRICITY IN WEST VIRGINIA MINES. By R. N. Williams. E. & M. J., vol. 90, p. 28. 12 columns. I
- USE OF ELECTRICITY IN AUSTRALIAN COLLIERIES By A. S. Brown. E. & M. J., vol. 86, p. 966. 4 columns.
- ELECTRICAL COLLIERY INSTALLATIONS IN SCOTLAND By J. B. Van Brunsell. E. & M. J., vol. 89, p. 782. 8½ columns. I.
- ELECTRICITY AT THE SHAMROCK I AND II COLLIERY, HERNE, WESTPHALIA, GERMANY. By H. M. Hudspeeth. T. I. M. E., vol. 39, p. 249. 17 pages. I.

THE USE OF ELECTRICITY IN THE BRITISH COLUMBIA COAL MINES. E. & M. J., vol. 89, p. 1074. 5½ columns.

THE ELECTRIFICATION OF MURTON COLLIERY, COUNTY DURHAM By E. S. Wood. T I M E, vol. 39, p. 226. 22 pages. I

EXPERIMENTS WITH TWO ELECTRICALLY DRIVEN PUMPS. By T L. Galloway. T I. M. E., vol. 36, p. 82. 11 pages.

See also **ROTARY PUMPS** and **ELECTRICALLY DRIVEN PUMPS.**

See also **ELECTRIC HOISTING** and **ELECTRIC HAULAGE.**

See also **COST OF FUEL**

Power Transmission: Electricity, Steam, Water and Miscellaneous

THE DEVELOPMENT AND OPERATION OF A LARGE ELECTRIC TRANSMISSION AND CONVERSION SYSTEM. By E. F. Smith. J. W. Soc. E., vol. 12, p. 409. 29 pages. I.

See also **ELECTRICITY IN THE MINE**, and first volume of **INDEX**, also **COST OF POWER.**

REDUCTION

The Reduction of Ores: Methods and Practice

ORE CRUSHING P. C. M. & M. Soc. S. A., vol. 9, p. 62. ¼ column.

CRUSHING ORE By M. P. Bass. Min. & Sci. Press, vol. 96, p. 354. 13 columns. I.

THE MECHANICS OF ORE CRUSHING. By C. De Kalb. Min. & Sci. Press, vol. 96, p. 155. 2½ columns. I

CRUSHING BY STAGES By A. Del Mar. Min. & Sci. Press, vol. 101, p. 614. 2½ columns

STAGE CRUSHING. By H. W. Harding. E. & M. J., vol. 89, p. 221. 3 columns.

NOVEL HAND CRUSHING DEVICE By H. L. Jene. E. & M. J., vol. 87, p. 788. 1½ columns. I.

BREAKING ORE BY TRIP HAMMER, EL COBRE, CUBA. M. & M., vol. 31, p. 451. I.

ECONOMY OF POWER IN CRUSHING ORE. By E. A. Hersam. Min. & Sci. Press, vol. 95, p. 621. 12 columns.

THE CALCULATION OF THE COMPARATIVE EFFICIENCIES OF CRUSHING AND GRINDING MACHINES. By R. W. Chapman. T. Au. I. M. E., vol. 13, p. 154. 4 pages. I.

ON TESTING REDUCING MACHINERY. By F. D. Power. T. Au. I. M. E., vol. 2, p. 81. 3½ pages

SOME NOTES ON DRY CRUSHING By N. F. White. T. Au. I. M. E., vol. 6, p. 37. 24 pages. I.

THE RISE AND FALL OF DRY CRUSHING ON THE HAURAKI GOLDFIELD. By P. Morgan. T. Au. I. M. E., vol. 9, p. 161. 15 pages.

PRACTICAL NOTES ON DRY CRUSHING MILLS IN WESTERN AUSTRALIA P. C. M. & M. Soc. S. A., vol. 10, p. 222. 5 columns.

DRY CRUSHING AT THE CONSOLIDATED MERCUR MINES. E. & M. J., vol. 89, p. 1277. 1 column.

See also **FINE CRUSHING BY MILLS.**

WESTRALIAN WET CRUSHING PLANTS, WITH SOME NOTES ON LABOUR EFFICIENCY. By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 8, p. 232, 14½ columns; p. 277, 1½ columns; p. 345, 1½ columns; p. 383, 1½ columns; vol. 9, p. 24, 1 column; p. 270, 4 columns.

REDUCTION OF ORES IN THE BARBERTON GOLDFIELD, SOUTH AFRICA. P. C. M. & M. Soc. S. A., vol. 10, p. 130. 2 columns.

NATOMAS 1500-TON PLANT FOR CRUSHING DREDGE TAILING. By G. Bowers. Min. & Sci. Press, vol. 99, p. 609. 8½ columns. I.

See also **DISPOSAL OF WASTE.**

"BATTLE-BOX" FOR CLEANING FINE BARITE. T. A. I. M. E., vol. 40, pp. 731 and 732. I.

See also **COST OF REDUCTION.**

Automatic Feeders for Reducing Machinery

NOTES ON FEEDERS WITH A DESCRIPTION OF A NEW DRIVING DEVICE. By D. J. Pepler. P. C. M. & M. Soc. S. A., vol. 8, p. 42, 3 columns, I.; p. 85, 1½ columns, p. 146, 3½ columns, I.; p. 182, 2½ columns.

THE HUNTER ORE FEEDER. P. C. M. & M. Soc. S. A., vol. 5, p. 9. 1½ columns. I.

AN IMPROVED BUFFER FOR ORE FEEDERS: Stamp Milling. By T. White. T. Au. I. M. E., vol. 5, p. 118. 1½ pages. I.

See also first volume of **INDEX**

Crushers: Construction and Operation

COMPARISON OF GYRATORY AND JAW CRUSHERS. By H. L. Wollenberg. E. & M. J., vol. 90, p. 509. 9½ columns. D.

CAPACITY OF CRUSHERS. Min. Mag., London, vol. 2, p. 45. 3 columns.

STONE BREAKERS FOR DRY CRUSHING. T. Au. I. M. E., vol. 6, p. 47. 3 pages.

THE EFFICIENCIES OF CRUSHERS. By R. W. Chapman. M. & M., vol. 30, p. 413. 2 columns. D.

A NEW COAL BREAKER (REDUCER). M. & M., vol. 29, p. 252. ¾ column. I.

COARSE CRUSHING AT THE BOSTON CONSOLIDATED MILL AT GARFIELD, UTAH. By L. S. Austin. Min. & Sci. Press, vol. 100, p. 123. 3 columns. I.

CRUSHING IN THE ELY, NEVADA, MILL. M. & M., vol. 29, p. 169. 1 column.

THE NEW COCHRAN CRUSHER. By J. T. Barkew. E. & M. J., vol. 88, p. 264. 4 columns. I.

CRUSHING MACHINES FOR CYANIDE PLANTS. By M. R. Lamb. T. A. I. M. E., vol. 41, p. 672, 4½ pages, p. 913, 1 page.

See also **CYANIDING OF GOLD** and **FINE CRUSHING, ETC.**

CRUSHERS USED IN THE CŒUR D'ALENE MILLS. E. & M. J., vol. 88, p. 1207. 4 columns. I.

See also **COST OF REDUCTION.**

Rolls: Construction and Operation

RULE FOR FIGURING CAPACITY OF ROLLS. By C. F. Spaulding. M. & M., vol. 31, p. 468. Note.

ROLLS IN THE CŒUR D'ALENE MILLS. E. & M. J., vol. 88, p. 1209, 1 column; p. 1210, 3 columns.

TANDEM ROLLS. E. & M. J., vol. 87, p. 939. 1 column.

See also first volume of **INDEX** and **COST OF REDUCTION.**

Stamp Mill Practice

THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS. By W. A. Caldecott. T. I. M. & M., vol. 19, p. 57. 89 pages. I.

THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS. By W. A. Caldecott. E. & M. J., vol. 88, p. 594. 12½ columns. I.

THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS. By H. S. Denny. E. & M. J., vol. 88, p. 1157. 4½ columns.

DEVELOPMENT OF GRAVITY STAMPS. By W. A. Caldecott. M. & M., vol. 30, p. 389. 9 columns. I.

DEVELOPMENT OF GRAVITY STAMPS. By C. O. Schmitt. M. & M., vol. 30, p. 625. 11 columns. I.

- THE DEVELOPMENT OF HEAVY GRAVITATION STAMPS.** By W. A. Caldecott. P. C. M. & M. Soc. S. A., vol. 10, p. 108, 13 columns, I., p. 178, 2 columns; p. 215, 13 columns, p. 331, 3 columns; p. 352, 29½ columns, I.; p. 241, 23 columns, I.
- EVOLUTION OF THE GRAVITY STAMP MILL** By A. Del Mar. E. & M. J., vol. 87, p. 890. 2 columns.
- NOTES ON THE CONSTRUCTION AND OPERATION OF STAMP MILLS.** By G. H. Fison. E. & M. J., vol. 88, p. 1131. 3½ columns.
- CONSTRUCTION AND OPERATION OF THE STAMP MILL** P. C. M. & M. Soc. S. A., vol. 10, p. 261. 4 columns.
- PRACTICAL WORKING OF THE STAMP MILL** By A. Del Mar. E. & M. J., vol. 88, p. 548. 4 columns.
- LIMITATIONS OF ONE AND FIVE STAMP BATTERIES** By A. Del Mar. Min. & Sci. Press, vol. 100, p. 640. 3½ columns.
- POWER REQUIRED FOR STAMPS.** Min. & Sci. Press, vol. 100, p. 222. ½ column. D.
- POSITION OF DRIVING POWER FOR STAMP MILLS.** By A. Del Mar. E. & M. J., vol. 89, p. 7. ½ column. I.
- See also **GENERAL APPLICATIONS OF POWER.**
- STAMPS IN AMALGAMATION** P. C. M. & M. Soc. S. A., vol. 5, p. 50. 8 columns.
- See also **AMALGAMATION OF GOLD AND SILVER.**
- THE CALIFORNIA STAMP MILL** By C. De Kalb. Min. & Sci. Press, vol. 100, p. 736. 5 columns. I.
- TREMAIN STEAM STAMPS.** By C. E. Parsons. Min. & Sci. Press, vol. 97, p. 386. 7 columns. I.
- WILSON'S STEAM STAMP MILL.** Min. & Sci. Press, vol. 20, p. 225. 1 page. I.
- THE HOLMAN AIR-CUSHION STAMP.** By E. Walker. E. & M. J., vol. 86, p. 213. 2½ columns. I.
- STAMPING.** Reduction of Ores in Hungary. Min. Mag., vol. 3, p. 262. 1½ pages.
- A MAKE-SHIFT STAMP MILL.** Min. & Sci. Press, vol. 95, p. 619. ½ column. I.
- BATTERY POSTS OF REINFORCED CONCRETE** By A. Del Mar. E. & M. J., vol. 88, p. 598. 2 columns. I.
- CONCRETE BATTERY POSTS** E. & M. J., vol. 88, p. 598. 2 columns. I.
- See also **USE OF CONCRETE IN MINES.**
- NOTE ON A MODIFICATION OF THE NORMAL TYPE OF BATTERY FRAME.** By G. W. Williams. P. C. M. & M. Soc. S. A., vol. 8, p. 198. 1 column. I.
- See also **FOUNDATIONS FOR MILL BUILDINGS.**
- CUSHIONING VIBRATIONS OF CAM-SHAFTS.** By A. Del Mar. Min. & Sci. Press, vol. 97, p. 877. 1½ columns. I.
- THE PROPER DESIGN OF CAMS.** By M. R. Lamb. E. & M. J., vol. 88, p. 66. 4½ columns. I.
- REPAIRING A MORTAR BOX PILE.** By A. Richardson. P. C. M. & M. Soc. S. A., vol. 9, p. 24. 4 columns. I.
- SOME ACCESSORY STAMP MILL APPLIANCES.** By S. O. Smart. P. C. M. & M. Soc. S. A., vol. 7, p. 133, 3 columns, I.; p. 183, 1 column; p. 269, 1 column; p. 292, 2 columns.
- LOW MORTARS AND HIGH HEADS.** By M. P. Boss. Min. & Sci. Press, vol. 101, p. 866. 2½ columns. I.
- EFFECT OF DISCHARGE LEVEL AND WATER SUPPLY ON STAMP CAPACITY.** E. & M. J., vol. 86, p. 386. 1 column.
- STAMP DROP SEQUENCE.** E. & M. J., vol. 89, p. 204. 2½ columns.
- STAMP DROP SEQUENCE.** E. & M. J., vol. 89, p. 597. 1 column.

- STAMP DROP SEQUENCE** By W. H. Storms. E & M. J., vol. 90, p. 109. 1 column. I.
- STAMP DROP SEQUENCE.** By H. S. Munroe. E. & M. J., vol 90, p. 949. 1 column. D.
- STAMP MILL PRACTICE AT MINAS DEL TAJO, SINALOA** E & M. J, vol. 89, p. 567. 2 columns.
- BATTERY PRACTICE AT THE PITTSBURG SILVER PEAK MILLS** Min & Sci. Press, vol. 98, p 658 1 column. I.
- STAMP MILL PRACTICE AT THE SUMMER DEEP AND JUPITER REDUCTION WORKS.** Min. & Sci. Press, vol. 99, p. 396. 6½ columns I.
- STAMP MILL PRACTICE ON THE MOTHER LODE** By A. Chalmers. Min & Sci Press, vol. 97, p. 785. 1½ columns. .
- A FEW NOTES ON STAMP MILLING.** By W. H. Jane. P. C. M. & M. Soc. S. A., vol. 8, p. 290, 2 columns; vol 9, p. 21, 1½ columns; p 46, 4 columns.
- SOME NOTES ON GOLD MILLING: Stamp Milling.** By W H. Vale. T Au. I. M. E., vol. 5, p. 124. 6 pages I.
- SOME NOTES ON GOLD MILLING PRACTICE IN BENDIGO: Stamp Milling.** By H. C. Boydell T Au. I. M. E., vol. 8, pt 2, p. 236 14 pages. I.
- MONTANA-TONOPAH STAMP AND CYANIDE MILL.** E. & M. J, vol. 85, p. 959. 5 columns. I.
- STAMP BATTERIES OF THE GOLDFIELD MILL.** E. & M J, vol 86, p. 470. 2 columns I.
- A GOLD STAMP MILL FOR LABORATORY TESTING.** By F. H. Sexton J M. Soc. N. S., vol. 10, p 125. 7½ pages. I.
- See also **METALLURGY OF GOLD AND SILVER, CYANIDING GOLD, AMALGAMATION OF GOLD AND SILVER**, first volume of INDEX, COST OF MINES AND MILL CONSTRUCTION, and COST OF REDUCTION.
- Fine Crushing by Mills: Ball and Miscellaneous Types**
- FINE GRINDING** By H. S Denny. Min. Mag., vol. 4, p. 219. 9 columns. D.
- GRINDING ORES AND MINERALS.** Min. & Sci. Press, vol. 101, p. 176. 1 column.
- EFFICIENCY OF FINE GRINDING MACHINES** By H. Stadler M & M, vol 30, p. 672 2½ columns.
- THE COMPUTATION OF CRUSHING EFFICIENCY OF FINE GRINDING MACHINES.** P. C. M. & M. Soc. S A, vol. 10, p. 374. 3 columns.
- CRUSHING EFFICIENCY OF FINE GRINDING MACHINES.** By H. Stadler. Min. & Sci. Press, vol 100, p. 900. 1½ columns.
- GRINDING TESTS AT PACHUCA.** By V. B Sherrod. Min & Sci. Press, vol. 100, p 357. 6 columns. I.
- BALL MILL FOR DRY CRUSHING.** T. Au. I. M E., vol. 6, p. 45, 2 pages; p. 53, 6 pages, I.
- See also **THE REDUCTION OF ORE: ETC.**
- THE FERRARIS WET-BALL MILL AS USED IN SARDINIA** T. A. I. M. E., vol. 39, p. 88. 4½ pages. I.
- THE CHILE MILL.** By M. R Lamb. E. & M. J., vol. 87, p 1182. 2½ columns. I
- SOME OF THE CHARACTERISTICS OF CHILEAN MILLS.** By H A Megraw. E & M. J., vol 90, p 967. 7 columns. I.
- INEXPENSIVE HOMEMADE 20-TON MILL: Arastra.** By T. Köhneke. Min. & Sci Press, vol. 97, p. 185. 2½ columns I.
- THE LANE MILL: A Slow-speed Edge Mill.** E & M J, vol. 85, p. 1053. 2 columns I.
- DRY CRUSHING WITH KRUPP OR GRIFFIN MILL.** Min. & Sci. Press, vol. 101, p. 402. 1 column.
- See also **THE REDUCTION OF ORES: ETC.**

- HOMEMADE GRINDING PAN.** By W. H. Washburn. Min. & Sci Press, vol. 100, p. 103. 1½ columns. I
- THE TUBE-MILL IN SLIME TREATMENT.** Min. & Sci. Press, vol. 101, p. 777. 1½ columns. I.
- See also **SLIMES AND THEIR TREATMENT.**
- THE TUBE-MILL CIRCUIT AND CLASSIFICATION.** By G. O. Smart P. C. M. & M Soc S. A., vol. 10, p. 282, 11½ columns, I; p. 452, 8½ columns, I.; p. 397, 8 columns, I.
- See also **CLASSIFIERS AND CLASSIFICATION.**
- THE PROBLEM OF FINE GRINDING IN TUBE MILLS.** By H. W. Hardinge. E. & M J, vol. 90, p. 1057. 4 columns. I.
- NOTES ON SOME RECENT IMPROVEMENTS IN TUBE MILL PRACTICE.** By K. L. Graham. P. C. M. & M. Soc. S. A., vol. 7, p. 317, 8 columns, I.; p. 368, 6 columns, I.; vol. 8, p. 18, 3 columns; p. 51, 2 columns; p. 78, 5½ columns.
- THE COMPUTATION OF THE CRUSHING EFFICIENCY OF TUBE MILLS.** By S. H. Pearce and W. A. Caldecott. P. C M. & M Soc S. A., vol. 7, p. 72, 4½ columns, p. 120, 4 columns, D.; p. 207, 8½ columns; p. 265, 7 columns, D.; p. 289, 1 column.
- THE THEORY OF THE TUBE MILL.** By H. A. White. P. C. M. & M. Soc. S. A., vol. 5, p. 290, 28½ columns, I; vol. 6, p. 52, ½ column; p. 81, ½ column; p. 112, 2 columns.
- A LABORATORY COMPARISON OF TUBE MILL PEBBLES.** By G. H. Stanley. P. C. M & M Soc. S. A., vol. 8, p. 376. 4½ columns. I.
- TUBE MILL CRUSHING IN CONNECTION WITH CYANIDING SLIMES.** By E. B. Wilson. M. & M, vol. 29, p. 8. 5½ columns. I.
- See also **CYANIDING GOLD AND SILVER. TUBE MILLS.** P. C. M. & M Soc. S A., vol. 8, p. 235. 1 column.
- NOTES ON TUBE MILLS.** Min & Sci. Press, vol. 95, p. 555 1½ columns.
- TUBE MILLING AND THE DIAPHRAGM CONE** Min. & Sci. Press, vol. 100, p. 483. 7 columns. I.
- TUBE MILLS FOR REGRINDING.** E. & M. J., vol. 88, p. 597. 2 columns.
- See also **THE REDUCTION OF ORES: ETC.**
- THE MULTIPLE TUBE MILL** E. & M. J., vol. 90, p. 1163. ½ column. I.
- TUBE MILL POWER** By H. E. West. E. & M. J, vol. 90, p. 1243 1½ columns
- See also **GENERAL APPLICATIONS OF POWER.**
- TUBE MILL PRACTICE.** By W. R. Dowling P. C M. & M Soc. S. A., vol. 6, p. 308, 13½ columns; p. 369, 12 columns, I., p. 12, 1½ columns; p. 44, 2 columns, p. 74, 3½ columns.
- A CONICAL TUBE MILL.** By H. W. Hardinge. Min. & Sci Press, vol. 96, p. 223. 3½ columns I.
- THE HARDINGE CONICAL PEBBLE MILL** By H. W. Hardinge. M. & M, vol. 29, p. 160 3 columns. I
- THE HARDINGE CONICAL PEBBLE MILL.** By H. W. Hardinge T A. I M. E., vol. 39, p. 336. 5 pages. I.
- LIFE OF TUBES MILL LINERS.** P C. M. & M. Soc. S. A., vol. 9, p. 241. ½ column.
- TUBE MILL LINING** P C M & M. Soc. S. A., vol. 7, p. 417. 1 column.
- HONEYCOMB LINERS.** .P. C. M. & M. Soc. S. A., vol. 8, p. 11. 3 columns. I.
- EL ORO TUBE MILL LINING.** E. & M. J., vol. 85, p. 811. ½ column I.
- TUBE MILL LINING.** By H. E. West. Min. & Sci. Press, vol. 96, p. 418. 4 columns. I.
- LINING FOR TUBE MILL.** Min & Sci. Press, vol. 95, p. 466. ½ column. I.
- FINE GRINDING TESTS: Tube Mill and Grinding Pans, Broken Hill South Mine.** By W. E. Wainwright and W J. M'Bride. T Au. I. M. E., vol. 13, p. 38. 20 pages. I.

GRINDING IN TUBE MILLS AT THE WAIHI GOLD MINE, WAIHI, NEW ZEALAND. By E. G. Banks. T. A. I. M. E., vol 38, p. 196. 4 pages.

TUBE MILLS AT THE GOLDFIELD MILL E. & M. J., vol. 86, p. 470. 1 column.

TUBE MILLS AT PACHUCA. Min. & Sci. Press, vol 100, p. 357. 6 columns I

TUBE MILLS AT GUANAJUATO. By C. W. Van Law Min & Sci. Press, vol 95, p. 205 1 column

See also **CYANIDING GOLD AND SILVER.**

See also **METHODS OF ASSAYING, ETC.**

See also **CYANIDING PLANTS, and COST OF REDUCTION**

FINE GRINDING IN 1906. E. & M. J., vol. 83, p 17 2½ columns.

ROPES FOR MINE USE

Kinds of Wire Rope, Methods of Manufacture, Etc.

NON-SPINNING ROPES. P C M & M. Soc. S. A., vol. 9, p 245 ½ column.

See also first volume of INDEX.

See also **COST OF HOISTING, and COST OF ROPES.**

Wire: Its Use and Manufacture

WIRE WINDING ROPES. P. C. M. & M. Soc. S. A., vol. 7, p. 188. 2½ columns.

WIRE ROPES IN COLLIERY PRACTICE. By R. H. Rowland E & M. J., vol. 89, p 278. 8½ columns I.

See also first volume of INDEX, and **ROPES, CHAINS, COUPLINGS, ETC.**

Paper and Fiber Ropes

See first volume of INDEX.

Connections for Wire Ropes, Splicing, Etc.

METHOD OF SPLICING WIRE AND OTHER ROPES. By J. Watt E. & M. J., vol. 89, p 414. 5½ columns. I.

SOME USEFUL KNOTS FOR ENGINEERS: Tying Knots in Ropes By A. L. Oke. E. & M J, vol 89, p. 697, 3½ columns, I.; p. 761, 3½ columns, I.; p 810, 3 columns, I.; p 906, 3 columns, I.

See also **ROPES, CHAINS, COUPLINGS, ETC.**

Strength of Ropes, Working Stresses, Examination and Tests

WIRE ROPE FORMULAS M & M., vol. 30, p 636 1 column D

STRESSES ON WINDING AND CONDUCTING ROPES, AS USED IN MINE-SHAFTS By J. Hindley and J. Stoney. T. I. M. E., vol 36, p. 286. 7 pages. I

NOTES ON THE WORKING AND TESTING OF LOCKED-COIL WINDING ROPE. By J Elce T. I. M. E., vol. 37, p. 635. 14 pages. I

THE STRESS IN WIRE ROPES DUE TO BENDING. By R. W. Chapman. T. Au. I. M. E., vol 12, p 131. 22 pages. D.

BENDING STRESSES IN WIRE ROPES. P. C. M. & M. Soc S. A., vol. 9, p. 318. ½ column

HOISTING ROPES. Factor of Safety, Inspection, Etc. E. & M J., vol. 90, p. 603 ½ column.

ROPE STRAINS IN HOISTING. By C. W. Beers E. & M. J., vol. 88, p 362. 3½ columns D.

See also **ROPES, CHAINS, COUPLINGS, ETC., and KINDS OF WIRE ROPES, ETC.**

Care and Protection of Wire Rope

LIFE OF LANG'S LAY WINDING-ROPES. P. C. M. & M. Soc. S. A., vol. 7, p 189. Table.

NOTES ON CORROSION, WITH SPECIAL REFERENCE TO THE CORROSION OF STEEL WINDING ROPES By M. T. Murray. P. C. M. & M. Soc. S. A., vol. 10, p. 54, 11½ columns, I.; p. 204, 2 columns.

A ROPE OILER. M. & M., vol. 29, p. 27 ½ column. I
See also first volume of INDEX.

Breakage of Wire Rope

See first volume of INDEX.

SAMPLING OF MINES AND ORES

Mine Sampling

DEVELOPMENT, SAMPLING AND ORIENTATION OF GOLD MINES By C. B. Horwood and Mungo Park. T. A. I. M. E., vol. 39, p. 685 9 pages. I.

SAMPLING IN WEST AUSTRALIA. E & M. J., vol. 86, p. 340 ¾ column.

SOME NOTES ON SAMPLING FOR GOLD By T. Turnbull. T. A. I. M. E., vol. 3, p. 71 4 pages.

RAND SAMPLING PRACTICE. By J. S. Olver. Min. & Sci. Press, vol. 97, p. 674. 4 columns

MINE SAMPLING AT THE KANSANSHI MINE Min. & Sci. Press, vol. 96, p. 528 6 columns

SAMPLING IN THE ALICE MINE, COLORADO M. & M., vol. 29, p. 295 ½ column.

See also PRACTICE IN SAMPLING ETC, METHODS OF SAMPLING AND APPARATUS, and COST OF SAMPLING.

Methods of Sampling and Apparatus Employed

NOTES ON SAMPLING. By A. C. Thomas T. A. I. M. E., vol. 10, p. 276. 12 pages.

SAMPLING METHODS. By J. M. Camp Min. & Sci. Press, vol. 99, p. 535. 3½ columns. I.

PRINCIPLES OF MINE SAMPLING. By J. A. Church. E. & M. J., vol. 86, p. 951. 9 columns. I.

CONSTANT ERRORS IN MINE SAMPLING. By L. D. Ricketts. E. & M. J., vol. 90, p. 316. 3 columns.

See also MINE SAMPLING.

CONSTANT ERRORS IN SAMPLING AND ASSAYING. By L. D. Ricketts Min. Mag., London, vol. 4, p. 127. 8 columns. I

METALLICS IN SAMPLING WORK. P. C. M. & M. Soc. S. A., vol. 7, p. 420. 2 columns.

SAMPLING AND WEIGHING. By H. W. Moss. T. A. I. M. E., vol. 8, pt. 1, p. 92. 5 pages

SAMPLING DEVICES E. & M. J., vol. 87, p. 218. ¾ column. I.

MACHINE SAMPLING E. & M. J., vol. 86, p. 238, 2 columns; p. 339, 1½ columns, p. 431, 6 columns; p. 631, 1 column; p. 917, 5½ columns; p. 1018, 6 columns; vol. 87, p. 269, 9 columns, I, p. 420, 1½ columns; p. 516, 4 columns, p. 862, 2 columns.

ACCURACY OF MECHANICAL AND RIFFLE ORE SAMPLERS By L. D. Hunton. E. & M. J., vol. 90, p. 62. 9½ columns.

NOTES ON STOPE BOX SAMPLING. By W. Bradford. P. C. M. & M. Soc. S. A., vol. 6, p. 103, 13 columns; p. 195, 2½ columns; p. 224, 2½ columns; p. 339, 4 columns.

See also MINE SAMPLING.

AN AUTOMATIC ORE SAMPLER. E. & M. J., vol. 86, p. 181. 1 column. I.

AN AUTOMATIC ORE SAMPLER By S. E. Bretherton Min. & Sci. Press, vol. 97, p. 321. 3 columns. I.

See also SAMPLING COAL AND ORES.

AUTOMATIC COAL SAMPLER. M. & M., vol. 31, p. 85. 1 column. I.

MECHANICAL COAL SAMPLER. By C. E. Scott. M. & M., vol. 31, p. 169. 2½ columns. I.

See also **SAMPLING COAL AND ORES.**

A SIMPLE SAMPLING DEVICE. By F. Cazin. E. & M. J., vol. 89, p. 358. 1 column. I

A SIMPLE SAMPLING DEVICE. E. & M. J., vol. 90, p. 1146. $\frac{3}{4}$ column. I.

A NEW SAMPLING DEVICE. By A. L. Oke. E. & M. J., vol. 86, p. 122. $\frac{1}{2}$ column. I.

THE COLE SAMPLER. E. & M. J., vol. 85, p. 1198. 2 columns. I.

SAMPLER FOR LEAD CONCENTRATES. E. & M. J., vol. 90, p. 253. $\frac{3}{4}$ column. I.

MINE SAMPLING DEVICES. By H. E. Hooper. Min. & Sci. Press, vol. 97, p. 704. 1 column. I.

MINE SAMPLING DEVICES. By H. E. Hooper. T. I. M. & M., vol. 18, p. 66. 2 pages. I.

See also **MINE SAMPLING.**

HAULTAIN SAMPLER FOR WET SANDS IN THE COEUR D'ALENE DISTRICT. E. & M. J., vol. 89, p. 875. 2 columns. I.

A BATTERY FEED SAMPLER. By J. H. Oates. E. & M. J., vol. 89, p. 1005. 1 column. I.

See also **STAMP MILL PRACTICE.**

IMPROVED SANDS AND SLIMES SAMPLERS. By H. Leupold. P. C. M. & M. Soc. S. A., vol. 5, p. 122. 4 columns. I.

SAMPLING FROM STAMPS AND HEAPS. Min. & Sci. Press, vol. 25, p. 274. $\frac{1}{2}$ column.

A SAND TANK SAMPLER. By H. W. MacFaiten. Min. & Sci. Press, vol. 97, p. 636. $\frac{1}{2}$ column. I.

See also **CYANIDING GOLD AND SILVER ORES** and **COST OF SAMPLING.**

Sampling Coal and Ores

COAL SAMPLING. By J. E. Woodman. J. M. Soc. N. S., vol. 12, p. 105. 7 pages.

METHODS OF SAMPLING ILLINOIS COALS. T. A. I. M. E., vol. 40, p. 17. 6 pages. I.

MINE SAMPLING AND CHEMICAL ANALYSIS OF COALS TESTED AT THE UNITED STATES FUEL-TESTING PLANT, NORFOLK, VIRGINIA. By J. S. Buttows. U. S. G. S., Bull. 362. 23 pages. 1908.

THE IMPORTANCE OF UNIFORM AND SYSTEMATIC COAL MINE SAMPLING. By J. S. Buttows. U. S. G. S., Bull. 316, p. 486. 32 pages. I. 1906.

SAMPLING AT COAL MINES. M. & M., vol. 31, p. 91. 1 column. I.

SAMPLES FROM MINE CARS, TIPPLES AND LOADING RAILROAD CARS. M. & M., vol. 31, p. 91. 3 columns. I.

SAMPLING COAL AND COKE. By E. G. Bailey. M. & M., vol. 31, p. 190, $5\frac{1}{2}$ columns, I.; p. 209, 2 columns.

COAL AND COKE SAMPLING. By E. G. Bailey. M. & M., vol. 31, p. 89. $8\frac{1}{2}$ columns. I.

SAMPLING OF ORE. By D. W. Brunton. Min. & Sci. Press, vol. 97, p. 665. 2 columns.

MODERN PRACTICE OF ORE SAMPLING. By D. W. Brunton. Min. & Sci. Press, vol. 99, p. 593. 8 columns. I.

MODERN PRACTICE IN ORE SAMPLING. By D. W. Brunton. T. A. I. M. E., vol. 40, p. 567. 29 $\frac{1}{2}$ pages. I.

CAUSES OF VARIATIONS IN ORE SAMPLING. By T. Kiddie. J. C. M. I., vol. 13, p. 556. 21 $\frac{1}{2}$ pages.

CAUSES OF VARIATIONS IN ORE SAMPLING. By T. Kiddie. E. & M. J., vol. 88, p. 825. 3 columns.

THE ELEMENT OF CHANCE IN THE SAMPLING OF ORES. By L. T. Wright. Min. Mag., London, vol. 3, p. 353. 12 columns.

SAMPLING AT THE GRANBY SMELTER. J. C. M. I., vol. 13, p. 276. 1 page.

SAMPLING AND ASSAYING THE ORES FROM CAPE PRINCE OF WALES. T. A. I. M. E., vol. 38, p. 677. 1 page.

SAMPLING AND BUYING ORE IN THE JOPLIN DISTRICT. By E. W. Buskett. E. & M. J., vol. 86, p. 190. 3 columns.

SAMPLING AND ASSAYING THE COPPER ORES OF THE ELY DISTRICT. By R. Marsh. Sch. Mines Quart., vol. 30, p. 91. 6½ pages.

SAMPLING ORES FROM THE COBALT DISTRICT. E. & M. J., vol. 87, p. 1283. 1½ columns.

SAMPLING ORES ON THE WEST COAST OF TASMANIA By F. D. Power. T. Au. I. M. E., vol. 3, p. 237. 6 pages.

THE SAMPLING OF SILVER-COBALT ORES AT COPPER CLIFF, ONTARIO. By A. A. Cole. J. C. M. I., vol. 11, p. 287. 6 pages I.

ORE SAMPLING BY MACHINERY. By J. A. Church. E. & M. J., vol. 86, p. 113. 7½ columns.

SAMPLING OF COBALT-SILVER ORES. E. & M. J., vol. 90, p. 809. ½ column.

SAMPLING ORES AT THE AUBURN MILL, NEVADA. Min. & Sci. Press, vol. 22, p. 248. ½ column.

See also **METHODS OF SAMPLING AND APPARATUS AND MINE SAMPLING.**

See also **DECOMPOSITION OF COAL AND COST OF SAMPLING.**

Sampling and Measurement of Ore Bodies

SAMPLING LOW-GRADE AND IRREGULAR OREBODIES. E. & M. J., vol. 90, p. 750. 1½ columns.

See also **METHODS OF SAMPLING AND APPARATUS, MINE SAMPLING, SAMPLING COAL AND ORES, and first volume of INDEX**

Practice in Sampling Minerals, Gravels, Etc.

SAMPLING PLACER GROUND. E. & M. J., vol. 89, p. 561. 5 columns. I.

SAMPLING MINE DUMPS. By S. L. Rawlins. Min. & Sci. Press, vol. 97, p. 120. 1½ columns.

SAMPLING OF MINE DUMPS By H. S. Munroe. Sch. Mines Quart., vol. 29, p. 233. 5 pages. I.

SAMPLING OF MINE DUMPS By H. S. Munroe. Min. & Sci. Press, vol. 96, p. 711. 2 columns. I.

CHURN DRILL GRAVEL SAMPLING. By J. P. Keene. Min. & Sci. Press, vol. 99, p. 289. 2½ columns.

CHURN DRILL SAMPLING. By W. E. Thorne. Min. & Sci. Press, vol. 98, p. 358. 3½ columns. I.

SAMPLING BY BORINGS FROM ROCK DRILLS E. & M. J., vol. 89, p. 710. 1 column.

See also **PROSPECT DRILLING, CHURN DRILLS AND DRILLING, and MACHINE OR POWER DRILLS.**

SAMPLING COPPER ANODES AT ANACONDA. By W. Wraith. E. & M. J., vol. 89, p. 666. 4 columns. I.

INFLUENCE OF NUMBER OF TEMPLET HOLES IN SAMPLING COPPER By D. M. Liddell. E. & M. J., vol. 90, p. 953. 2 columns. I.

TOP AND BOTTOM DRILLING IN PIG COPPER By D. M. Liddell. E. & M. J., vol. 90, p. 897. 2 columns.

SAMPLING ANODE-COPPER, WITH SPECIAL REFERENCE TO SILVER-CONTENT. By W. Wraith. T. A. I. M. E., vol. 41, p. 318. 6 pages. I.

SAMPLING LEAD CONCENTRATES. E. & M. J., vol. 89, p. 1216. ½ column. I.

SAMPLING AND ASSAYING SPELTHER. By E. W. Buskett. E. & M. J., vol. 85, p. 812. 2½ columns.

SAMPLING THE PRODUCTS OF CONCENTRATING AND SLIMING TABLES. C. M. & M. Soc. S. A., vol. 6, p. 175. 1½ columns.

See also **CONCENTRATORS: TABLES, BUDDLES, ETC.**

THE GOLDFIELD CONSOLIDATED SAMPLING MILL. By J. A. Church. E. & M. J., vol. 87, p. 311. 3½ columns. I.

SIZING OF MINERAL

Screens, Theory of Sizing, Etc.

SCREEN ASSAY VALUE P C M & M.
Soc. S A, vol 7, p 362. 1 column.

THE SCREEN ASSAY ON THE MEYER
AND CHARLTON G. M. UNDER "THE
NEW METALLURGY." By C.
Toombs. P C M & M. Soc S A,
vol. 7, p. 277, 4½ columns, p 331,
2 columns; p 360, 4½ columns;
p. 411, 6½ columns; vol. 8, p 44,
3½ columns

SCREEN ANALYSIS AND GRINDING EFFI-
CIENCY. By A. Yates. Min. & Sci
Press, vol. 98, p. 624. 2 columns.

THE STANDARDIZATION OF BATTERY
SCREENING P. C. M. & M. Soc
S. A., vol. 7, p 47. 2½ columns.

THE STANDARDISATION OF SCREENS
P. C. M. & M. Soc. S. A., vol. 6,
p. 115, 6 columns; p. 167, 2 columns.

REPORT OF SUB-COMMITTEE ON THE
STANDARDIZATION OF BATTERY
SCREENS. P C M. & M. Soc. S A,
vol. 6, p 393. 24 columns. Tables.

CLOSE SIZING OF DRY FINELY CRUSHED
ORES. By E G. Steele E. & M. J.,
vol. 87, p. 493. 7½ columns. I.

SCREENING AT THE UTAH COPPER
MILL By H. B Lowden E &
M. J., vol. 87, p. 992 ¼ column.

SCREEN FOR SEPARATING WOOD PULP
FROM ORE PULP, BUNKER HILL MILL.
Min Mag., London, vol 2, p 445.
Note. I.

See also first volume of INDEX

Kinds of Screens and Methods of Operation

LABORATORY SCREENS. P. C. M. &
M. Soc. S. A., vol. 10, p. 73. 2 col-
umns.

A STANDARD SERIES OF SCREENS FOR
LABORATORY TESTING. By T. J.
Hoover T. I M & M., vol. 19,
p 486. 49 pages

A STANDARD SERIES OF SCREENS FOR
LABORATORY TESTING By T. J.
Hoover E. & M. J., vol. 90, p. 27.
3 columns. Table.

See also SCREENS and THEORY OF
SIZING.

TROMMELS USED IN THE CŒUR D'
ALENE MILLS. E. & M. J., vol. 89,
p. 25. 8 columns. I.

GYRATORY SCREENS. E. & M J.,
vol. 87, p 494 1 column.

THE "VIBRA-CONE" SEPARATOR E &
M. J., vol. 85, p. 902 1 column.
I

THE CALLOW SCREEN. P. C. M. & M.
Soc S. A., vol. 9, p. 313. 2 col-
umns

THE FRANZ SCREEN. M & M, vol. 31,
p. 126. ¼ column I.

THE BUNKER HILL SCREEN. A New
Form of Revolving Screen. Min.
Mag., London, vol. 3, p 49. 1½ col-
umns. I

THE KEEDY SIZER FOR CLASSIFYING
COMPLEX ORES. By C F. Dietz and
D. V Keedy E. & M. J., vol. 89,
p 322. 12 columns. I.

See also CLASSIFIERS AND CLASSIFI-
CATION.

UNDERGROUND GRIZZLIES E. & M J.,
vol 88, p. 1279. 2½ columns. I.

SCREENING OF ORES IN SARDINIA. T. A.
I M E, vol. 39, p. 73. 3½ pages. I.

CLAY SCREENS VS. DRYING ORES. By
H. W. Fox. M. & M., vol. 30,
p. 615. 3 columns. I.

See also COST OF SIZING.

SIGNALING IN MINES

Signal Codes for Mines

MINE SIGNALS E & M. J., vol. 85, p. 151. 1 column.

MINE SIGNALS FOR VARIOUS STATES. E & M. J., vol. 86, p. 1088, 1 column; p. 1091, Note, p. 1092, $\frac{1}{2}$ column; p. 1093, Note.

CODE OF MINE SIGNALS: The Cleveland Cliffs Iron Company. By O. D. McClure. T L. S. M. I., vol. 14, p. 147. 9 pages.

SIGNALS IN QUINCY MINE, MICHIGAN. J. C. M. I., vol. 10, p. 414. $\frac{1}{2}$ page.

MINE SIGNALS IN CALIFORNIA Min. & Sci. Press, vol. 98, p. 702 1 $\frac{1}{2}$ columns.

BELL SIGNALS IN LAKE SUPERIOR DISTRICT. By W. L. Fleming. E. & M. J., vol. 89, p. 1263. 1 $\frac{1}{2}$ columns.

Methods of Signaling

A MINE SIGNAL SYSTEM: Use of Sema-phores. Min. & Sci. Press, vol. 96, p. 106. 1 $\frac{1}{2}$ columns.

AUTOMATIC SIGNAL RECORDER FOR MINES. M. & M., vol. 29, p. 351 $\frac{1}{2}$ column.

A NOVEL SYSTEM OF SIGNALING. By A. Gradenwitz. E. & M. J., vol. 89, p. 976 3 $\frac{1}{2}$ columns. I.

See also COST OF SIGNALING.

Compressed Air, Electricity, Tele-phones, Etc.

ELECTRIC SIGNAL SYSTEM. Min. & Sci. Press, vol. 96, p. 460. $\frac{1}{2}$ column. I.

PULL SWITCHES FOR ELECTRIC MINE SIGNALS E. & M. J., vol. 86, p. 775. 2 columns.

ELECTRIC MINE SIGNALING E. & M. J., vol. 87, p. 855. 2 columns. I.

ELECTRIC MINE SIGNALING. E & M. J., vol. 87, p. 1248. 3 columns. I.

ELECTRIC SIGNALING IN MINES P. C M & M. Soc S. A., vol. 10, p. 333. 1 $\frac{1}{2}$ columns

ELECTRIC SIGNALING AT MINES E. & M J., vol. 86, p. 1170. 1 $\frac{1}{2}$ columns I.

ELECTRIC SIGNALS IN SHAFTS. By W. E Wainwright. Min & Sci Press, vol. 100, p. 428. 2 $\frac{1}{2}$ columns I.

ELECTRIC SIGNAL TO SHAFT BOTTOM, ENGINE, AND WEIGH ROOM. By M. M. Haley. M. & M., vol. 31, p. 353. $\frac{1}{2}$ column.

TELEPHONES FOR MINE USE M & M., vol. 29, p. 281. 2 $\frac{1}{2}$ columns. I.

A PORTABLE TELEPHONE EQUIPMENT. By H. M. Payne. E. & M. J., vol. 89, p. 382. 1 column.

THE MINE TELEPHONE AND ITS AD-VANTAGES E. & M J., vol. 86, p. 722 4 columns. I.

MINE SIGNALING BY COMPRESSED AIR. M. & M., vol. 29, p. 276. 1 $\frac{1}{2}$ columns. I.

MINE SIGNALS 'BY COMPRESSED AIR. E. & M. J., vol. 86, p. 857. 3 columns I.

BELL-CRANK LEVER SYSTEM OF SIG-NALING IN RAND MINES E. & M. J., vol. 85, p. 393. Note.

See also METHODS OF SIGNALING and COST OF SIGNALING.

SURVEYING

Methods of Surveying

ON MINING SURVEYS. By A. Beau-lands. Min. Mag., vol. 9, p. 337. 3 pages.

THE PRACTICAL MINER'S GUIDE. A Means of Calculating Distances on Inclines and Distances to Raise and Drift; Surveying. Min. Mag., vol. 9, p. 31, 4 pages, I, Table; p. 121, 33 pages, I; p. 197, 16 pages; p. 293, 4 pages, Table; p. 391, 11 pages, Tables; vol. 8, p. 260, 8 pages; p. 355, 6 pages; p. 460, 4 pages, D; p. 508, 18 pages.

ACCURACY IN SURVEYING. By L. Fraser. Min. & Sci. Press, vol. 99, p. 332. 1½ columns. D.

METHOD OF DETERMINING THE MERIDIAN FROM A CIRCUMPOLAR STAR AT ANY HOUR. By E. R. Rice. T. A. I. M. E., vol. 41, p. 823. 10½ pages. I.

DETERMINATION OF MERIDIAN. M. & M., vol. 31, p. 682. 1 column.

DETERMINING THE TRUE MERIDIAN. By A. W. Warwick. Min. & Sci. Press, vol. 97, p. 531. 7½ columns.

DETERMINATION OF THE MERIDIAN. By C. E. Rowe. M. & M., vol. 30, p. 488. 5½ columns. I.

DETERMINATION OF LATITUDE. By C. E. Rowe. M. & M., vol. 31, p. 119. 2½ columns. I.

DETERMINATION OF THE MERIDIAN. By J. Underhill. M. & M., vol. 30, p. 660, 2½ columns, I; p. 661, 1 column, I.

DETERMINATION OF THE MERIDIAN. By F. A. Dalburg. M. & M., vol. 30, p. 668. 3 columns.

SEPARATE LEAF SYSTEM FOR RECORDING SURVEY NOTES. By L. Fraser. E. & M. J., vol. 88, p. 1268. 5 columns. D.

SURVEYING THE PUBLIC LAND OF THE UNITED STATES. By H. W. MacFarran. Min. & Sci. Press, vol. 100, p. 189. 8 columns. D.

PLOTTING COORDINATE SURVEYS. By J. J. Bristol. Min. & Sci. Press, vol. 100, p. 487, 8 columns, I; p. 524, 7½ columns, I.

See also SURVEYING INSTRUMENTS and SURFACE SURVEYS.

Surveying Instruments

A FEW OBSERVATIONS ON MINE SURVEYING AND SURVEYING INSTRUMENTS. By R. Provis. T. A. I. M. E., vol. 3, p. 171. 12 pages.

DEFLECTING ANGLES WITH A 30-FOOT TAPE. By L. Fraser. Min. & Sci. Press, vol. 99, p. 470. 1 column. I.

EFFECT OF THE INCLINATION OF THE STADIA ROD UPON STADIA DISTANCES. By B. Levitt. Sch. Mines Quart., vol. 31, p. 26. 19 pages. D.

NEED OF INSTRUMENTAL SURVEYING IN PRACTICAL SURVEYING. By B. S. Lyman. T. A. I. M. E., vol. 40, p. 636. 8 pages. I.

THE VERSCHOYLE POCKET TRANSIT. By W. D. Verschoyle. T. A. I. M. E., vol. 38, p. 398. 4½ pages. I.

THE BACK-SIGHT LAMP. By Paul A. Gow. E. & M. J., vol. 90, p. 1097. 1½ columns. I.

A NOVEL STADIA ROD. By J. H. Granbery. E. & M. J., vol. 87, p. 456. 2 columns. I.

A TIME-SAVING STADIA CHART. M. & M., vol. 30, p. 268. 2 columns. I.

A NEW METHOD OF MEASURING HEIGHTS BY MEANS OF THE BAROMETER. By G. K. Gilbert. U. S. G. S., 2d Ann. Rept., pp. 403-566. 1880-81. I.

See also METHODS OF SURVEYING.

Magnetic Surveys

MAGNETIC DECLINATION IN THE UNITED STATES. By H. Gannett U. S. G. S., 17th Ann. Rept., pt. 1, pp. 203-440 1895-96 I

See also first volume of INDEX.

Surface Surveys: Claims, Etc.

A TRIANGULATION STATION. By L. Fraser E. & M. J., vol. 87, p. 1124 1½ columns. I.

A DURABLE TRIANGULATION STATION M. & M., vol. 31, p. 23 ¼ column. I.

TRIANGULATION AND SPIRIT LEVELING. By H. M. Wilson and others. U. S. G. S., 18th Ann. Rept., pt. 1, pp. 131-422, 1896-97; 19th Ann. Rept., pt. 1, pp. 145-408, 1897-98; 20th Ann. Rept., pt. 1, pp. 211-530, 1898-99; 21st Ann. Rept., pt. 1, pp. 205-582, 1899-1900.

TRIANGULATION AND SPIRIT LEVELING IN INDIAN TERRITORY. By C. H. Fitch. U. S. G. S., Bull. 175. 141 pages. Map. 1900

ON METHODS OF MAKING LARGE SCALE CONTOUR SURFACE PLANS OF CLAIMS OR MINING PROPERTIES. By W. H. Boyd J. C. M. I., vol. 13, p. 444. 11 pages. D

CONTOURING ON MINING PROPERTIES WITH THE AID OF THE TACHEOMETER. By H. P. Scale. T. A. I. M. E., vol. 6, p. 62. 24½ pages. I.

MANUAL OF TOPOGRAPHIC METHODS. By H. Gannett. U. S. G. S., Bull. 307 88 pages I. 1906.

COOPERATION IN TOPOGRAPHY, HYDROGRAPHY AND GEOLOGY, BETWEEN THE UNITED STATES GEOLOGICAL SURVEY AND THE VARIOUS STATE GOVERNMENTS By E. W. Parker. J. M. Soc. N. S., vol. 13, p. 109. 15 pages.

TOPOGRAPHIC ENGINEERING. By W. D. Blackburn. E. & M. J., vol. 87, p. 997. 3 columns.

A BALLOON SURVEY By W. S. Weeks. E. & M. J., vol. 87, p. 1079 1½ columns. I

SURVEY OF THE NORTHWESTERN BOUNDARY OF THE UNITED STATES, 1857-1861 By M. Baker U. S. G. S., Bull. 174. 78 pages Map. 1900.

SURVEY OF THE BOUNDARY LINE BETWEEN IDAHO AND MONTANA FROM THE INTERNATIONAL BOUNDARY TO THE CREST OF THE BITTERROOT MOUNTAINS By R. W. Goode U. S. G. S., Bull. 170. 67 pages I 1900

LOCATION AND SURVEY OF RESERVOIR SITES. By A. H. Thompson. U. S. G. S., 12th Ann. Rept., pt. 2, pp. 1-212. 1890-91. I.

COMPENSATING GRADES FOR MINE RAILROAD SIDINGS. By R. D. N. Hall. M. & M., vol. 31, p. 768. 2 columns.

See also **MINE ROADS, ETC.**

TONNAGE ESTIMATION IN DUMPS, OPEN-CUTS, ETC. E. & M. J., vol. 87, p. 1011. 3 columns.

See also **METHODS OF SURVEYING.**

Underground Surveys

MODERN METHODS IN MINE SURVEYING. By H. W. Gastrell. T. A. I. M. E., vol. 13, p. 194. 16 pages I.

DETAILS OF MINE SURVEYING. By A. E. Robinson. Min. & Sci. Press, vol. 101, p. 294. 11½ columns. I.

MINE SURVEYING AND OFFICE METHODS. By C. Enzian Coal Mining Supplement, E. & M. J., vol. 88, p. 36. 15 columns. I.

MINE SURVEY NOTES. By G. W. Riter. T. A. I. M. E., vol. 41, p. 790. 7 pages.

MINE SURVEYING HINTS. By E. D. North. Min. & Sci. Press, vol. 98, p. 261. 1½ columns. I.

SURVEYING AND MAPPING IN THE GRANBY MINES J. C. M. I., vol. 11, p. 403. 1½ pages.

See also **MAP MAKING.**

MINE SURVEYING METHODS EMPLOYED AT BUTTE, MONTANA. By P. A. Gow. E. & M. J., vol. 90, p. 1209. 8½ columns. I.

COLLIERY SURVEY NOTES. By R. Shumway. M. & M., vol. 31, p. 61. 1½ columns. I.

SURVEYING AT LITTLE COLLIERY. By J. H. Hærtter. M. & M., vol. 29, p. 108. 5½ columns. I.

COLLIERY SURVEYS. By D. Harrington. M. & M., vol. 30, p. 94, 6½ columns; p. 234, 2½ columns; p. 305, 5½ columns; p. 337, 5 columns, I.; p. 439, 5 columns.

SURVEYING AN INACCESSIBLE STOPE. By A. E. Robinson. Min. & Sci. Press, vol. 101, p. 678. 1½ columns. I.

STOPE MEASUREMENTS. By O. S. Townesen. P. C. M. & M. Soc. S. A., vol. 9, p. 375. 28 columns. I.

STOPE MEASUREMENTS. By O. S. Townesen. P. C. M. & M. Soc. S. A., vol. 10, p. 13, 1½ columns; p. 63, 3½ columns, I.; p. 105, 2 columns; p. 140, 2½ columns, I.; p. 369, 7½ columns.

TUNNEL SURVEY IN AN ANTHRACITE COLLIERY. By D. P. Jones. E. & M. J., vol. 89, p. 881. 2½ columns. I.

UNDERGROUND CURVES. E. & M. J., vol. 89, p. 1149. 1 column. I.

See also MINE ROADS, TRACKS, ETC.

A DISCUSSION OF MINE CURVE PROBLEMS. By J. E. Tiffany. E. & M. J., vol. 86, p. 230. 12½ columns. I.

CONTOUR MAPS OF ORE-BODIES. M. & M., vol. 29, p. 343. ½ column. I.

See also COST OF SURVEYING.

Shaft-Plumbing

PLUMBING A DEEP SHAFT. Min. & Sci. Press, vol. 95, p. 427. 1½ columns.

PLUMBING A SHAFT IN THE ANTHRACITE FIELDS. Coal Mining Supplement, E. & M. J., vol. 88, p. 37. 2½ columns. I.

MODERN METHOD OF PLUMBING A SHAFT. By J. P. Davis. E. & M. J., vol. 89, p. 1174. 5 columns. I.

MINE SURVEYING. With Special Reference to Shaft Surveying. By C. E. Morrison. Sch. Mines Quart., vol. 29, p. 34. 12 pages. I.

TRANSPORTATION

Methods of Transportation

TRANSPORTATION. By R. Reford. J. M. Soc. N. S., vol. 12, p. 23. 34 pages.

COAL MINE TRANSPORTATION. By E. B. Wilson. M. & M., vol. 31, p. 408. 3½ columns. I.

See also HAULAGE SYSTEMS.

TRANSPORTATION IN NICARAGUA. T. A. I. M. E., vol. 41, p. 602. 2 pages.

TRAVEL IN COLOMBIA. By C. De Kalb. Min. & Sci. Press, vol. 98, p. 350. 4 columns. Map.

PNEUMATIC TRANSPORTATION OF COAL. E. & M. J., vol. 89, p. 674. ½ column.

See also COMPRESSED AIR IN MINING.

HINTS TO ORE SHIPPERS. By S. E. Bretherton. Min. & Sci. Press, vol. 101, p. 530. 5½ columns.

See also ECONOMIC AND INDUSTRIAL FEATURES OF MINING.

Portage, Packing and Fluming

PORTAGE IN THE BOLIVIAN TIN MILLS. E. & M. J., vol. 90, p. 1054. ½ column.

PACKING 13,000 FEET OF STEEL CABLE OVER A MOUNTAIN TRAIL. E. & M. J., vol. 86, p. 672. 1 column. I.

TRANSPORTATION BY ANIMALS IN MEXICO. E. & M. J., vol. 88, p. 680. 1 column.

MULE-BACK TRANSPORTATION OF SECTIONALIZED MACHINERY. By F. C. Roberts and W. W. Brady. Min. & Sci. Press, vol. 98, p. 751. 9½ columns. I.

TRANSPORTATION BY SLUICE. E. & M. J., vol. 85, p. 1058. 1 column.

TRANSPORTATION OF COAL BY FLUME. By R. M. Magraw M. & M., vol. 30, p. 236 6 columns I.

TRANSPORT OF MACHINERY IN MOUNTAINOUS COUNTRIES By H. H. Kress and A. S. Cameron Min. & Sci. Press, vol. 95, p. 471 2 columns I.

See also COST OF PACKING AND PORTAGE and COST OF TRANSPORTATION.

Transportation by Rail

ALLOTMENT OF CARS ALONG THE CHESAPEAKE AND OHIO RAILWAY COMPANY. M. & M., vol. 29, p. 400. 1 column.

METHOD OF COAL CAR ALLOTMENT USED BY CAR ALLOTMENT COMMISSION OF THE NORFOLK AND WESTERN RAILWAY COMPANY. By W. A. Jenks. M. & M., vol. 29, p. 470. 1½ columns

MINE INSPECTION FOR CAR ALLOTMENT By H. B. Douglas. M. & M., vol. 30, p. 92 3½ columns.

See also INSPECTION OF MINES.

CAR DISTRIBUTION TO COAL MINES. E. & M. J., vol. 90, p. 599. 2 columns.

COAL DISTRIBUTION AND THE OWNERSHIP OF COAL CARS. E. & M. J., vol. 86, p. 623. 1 column.

SOME PHASES OF THE AMERICAN RAILROAD PROBLEM By S. Fish. Sch. Mines Quart., vol. 29, p. 1. 14 pages.

LIGHT RAILWAYS. By A. Campbell. T. A. I. M. E., vol. 2, p. 85, 13 pages. I.

THE RAILROAD SYSTEMS OF NORTHERN MEXICO. By H. A. Horsfall. E. &

M. J., vol. 87, p. 712. 4 columns. Map.

NARROW-GAUGE RAILWAYS FOR MINES AND SMELTING WORKS By O. W. Scholz. E. & M. J., vol. 86, p. 1052. 1½ columns.

A EUROPEAN ELECTRIC COLLIERY RAILWAY. By J. B. Van Brussel. E. & M. J., vol. 89, p. 378. 5½ columns. I.

See also ELECTRICITY IN THE MINE.

COPPER RIVER AND NORTHWESTERN RAILROAD, ALASKA. By L. W. Storm. E. & M. J., vol. 90, p. 77. 8½ columns. I.

AN ORE TRANSPORTING RAILWAY IN THE PYRENEES. By A. Gradenwitz. E. & M. J., vol. 87, p. 1119. 7 columns. I.

A NEW ARIZONA-SONORA RAILROAD. E. & M. J., vol. 90, p. 368. 3 columns. Map.

See also COST OF TRANSPORTATION

Capacity of Cars, Gauge, Etc.

See first volume of INDEX.

Rails, Rail-Sections, Etc.

STEEL RAILS. P. C. M. & M. Soc. S. A., vol. 9, p. 171 1 column

STEEL RAILS FOR PRESENT SERVICE: Their Manufacture and Their Failures By P. H. Dudley J. W. Soc. E., vol. 13, p. 471. 17½ pages I.

ON THE DURABILITY OF RAILROAD IRON. By W. Truran. Min. Mag., vol. 4, p. 248, 10 pages, vol. 5, p. 291, 2 pages.

STANDARD RAIL SECTIONS AND FISH BAR JOINTS. By W. R. Jones. P. E. Soc. W. Pa., vol. 3, p. 33. 21 pages. I.

COMPARISON OF AMERICAN AND FOREIGN RAIL SPECIFICATIONS, WITH A PROPOSED STANDARD SPECIFICATION TO COVER AMERICAN RAILS ROLLED FOR EXPORT: A Discussion of A. L. Colby Paper. T. A. I. M. E., vol. 38, p. 916. 7 pages.

A RELIABLE STEEL RAIL AND HOW TO MAKE IT By J. E. York. T. A. I. M. E., vol. 40, p. 341. 13 pages. I.

See also **MINE ROADS AND TRACKS**

Wagon Roads, Wagons and Traction Engines

ROAD RESISTANCES By C. E. Morrison. Sch. Mines Quart., vol. 29, p. 159. 19 pages. I.

MACADAM ROADS AND THEIR PRESERVATION. By L. W. Page. J. W. Soc. E., vol. 15, p. 57. 23 pages.

SPECIFICATIONS AND NOTES ON MACADAM ROAD CONSTRUCTION By A. N. Johnson. J. W. Soc. E., vol. 13, p. 767. 25 pages.

PRELIMINARY REPORT ON GEOLOGY OF COMMON ROADS OF UNITED STATES. By N. S. Shaler. U. S. G. S., 15th Ann Rept., pp. 1-110. 1893-94.

FREIGHTING ORE WITH BIG STRING TEAMS. By G. C. McFarlane. E. & M. J., vol. 87, p. 1078. 4 columns.

See also **PORTAGE, PACKING AND FLUMING**

ROAD DISTANCES IN NEVADA. Min. & Sci. Press, vol. 95, p. 748. $\frac{1}{2}$ column.

See also **COST OF TRANSPORTATION.**

River Transportation

TRANSPORTATION FACILITIES IN ALASKA AND THE YUKON. By W. M. Brewer. Min. & Sci. Press, vol. 98, p. 485. $5\frac{1}{2}$ columns. Map

THE NILE AS A MINING RIVER. By A. Del Mar. Min. & Sci. Press, vol. 95, p. 463. $5\frac{1}{2}$ columns. I

WATER TRANSPORTATION IN THE BIRMINGHAM DISTRICT. E. & M. J., vol. 88, p. 301. $4\frac{3}{4}$ columns.

THE OHIO RIVER: Improvement for Navigation. By J. W. Arras. P. E. Soc. W. Pa., vol. 24, p. 241. 37 pages. I

THE MONONGAHELA RIVER: Methods of Improvement of Navigation. By T. P. Roberts. P. E. Soc. W. Pa., vol. 24, p. 193. 28 pages. I

See also **METHODS OF TRANSPORTATION.**

Canal Transportation

CONSTRUCTION OF THE PANAMA CANAL. M. & M., vol. 30, p. 330. $2\frac{1}{2}$ columns. I.

THE PANAMA CANAL. By G. H. Mee. M. & M., vol. 31, p. 241. $6\frac{1}{2}$ columns. I.

INLAND WATER TRANSPORTATION IN ENGLAND. By J. Douglas. E. & M. J., vol. 89, p. 468. 4 columns.

See also first volume of **INDEX** and **COST OF TRANSPORTATION**

Lake Transportation

See first volume of **INDEX.**

Ocean Transportation

A SHORT DESCRIPTION OF THE VARIOUS TYPES OF COAL CARGO STEAMERS AND OF DOCKFORDS' NEW SELF-DISCHARGING STEAMER. By J. Kirsopp. T. I. M. E., vol. 37, p. 416. 25 pages. I.

See also first volume of **INDEX.**

Cableways: Their Construction and Use

THE USE OF AERIAL WIRE ROPE TRAMWAYS By H. M. Payne. E. & M. J., vol. 89, p. 832. $6\frac{1}{2}$ columns. I.

SOME GERMAN OVERHEAD TRAMWAYS. By A. Gradenwitz. E. & M. J., vol. 85, p. 449. 9 columns. I.

HALLIDIES' ENDLESS WIRE ROPE-WAY. Min. & Sci. Press, vol. 22, p. 104. 4 columns. I.

SHIPPING COAL BY AERIAL ROPEWAYS. T. I. M. E., vol. 36, p. 692. 8 pages. I.

AERIAL TRAMWAY FOR COAL. By R. M. Magraw. M. & M., vol. 29, p. 531. 6½ columns. I.

THE DEL CARMEN AERIAL TRAMWAY, MEXICO. M. & M., vol. 31, p. 437. 4 columns. I.

THE ROPEWAY (OTTO) AT THE PIERREFITTE MINES, FRANCE. T. A. I. M. E., vol. 39, p. 374. 5 pages. I.

TRANSPORTATION BY ELECTRICAL SUSPENDED RAILWAY. By A. Graden-

witz. E. & M. J., vol. 88, p. 912. 9 columns. I.

AERIAL OR WIRE ROPE HAULAGE. M. & M., vol. 31, p. 46. 4 columns. I.

UTAH CONSOLIDATED AERIAL TRAMWAY By L. A. Palmer. M. & M., vol. 31, p. 150. 3½ columns. I.

See also first volume of INDEX, COST OF TRAMMING, and COST OF OPERATING TRAMWAYS.

TUNNELING

Methods of Tunneling

PROBLEMS IN TUNNEL DRIVING By C. R. Gent. M. & M., vol. 30, p. 279. 2½ columns

PROBLEMS OF TUNNEL DRIVING. By C. R. Gent. M. & M., vol. 30, p. 509. 1 column. I.

BLASTING IN THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL E. & M. J., vol. 86, p. 757. 2 columns.

BLASTING IN THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 389. 1 column

See also **BLASTING IN MINES: METHODS AND CONDITIONS.**

METHOD OF DRIVING THE LOS ANGELES AQUEDUCT TUNNEL M. & M., vol. 31, p. 140. 5 columns. I.

MINING METHODS IN NEW YORK TUNNELS. E. & M. J., vol. 88, p. 1236. 3 columns. I.

MINING OPERATIONS IN NEW YORK CITY AND VICINITY. By H. T. Hildage. T. A. I. M. E., vol. 38, p. 360. 38 pages. I.

ADVANCING THE HOT TIME LATERAL OF THE NEWHOUSE TUNNEL By H. M. Adkinson. E. & M. J., vol. 86, p. 757. 6½ columns. I.

See also **DIFFICULTIES ENCOUNTERED IN MINING, ETC**

TUNNEL DRIVING IN COLORADO. By H. F. Bain. Min. & Sci. Press, vol. 99, p. 743. 9½ columns I.

LOADING BLAST HOLES AND DRIVING SMALL DRIFTS. P. C. M. & M. Soc. S. A., vol. 10, p. 152. 3 columns.

See also **METHODS OF CHARGING AND FIRING EXPLOSIVES.**

LEVEL DRIVING IN OIL-SHALE MINING, SCOTLAND. T. I. M. E., vol. 36, p. 583. 2 pages. I.

ON DRIVING ADITS AND THE MODE IN PRACTICE OF TIMBERING MINES. By W. Smyth. Min. Mag., vol. 9, p. 328. 4 pages.

DRIVING BREASTS ON THE RAND. P. C. M. & M. Soc. S. A., vol. 10, p. 280. 2 columns I.

DRIVING A 7-FOOT ENTRY: Coal Mining. E. & M. J., vol. 86, p. 7. ½ column. I.

DRIVING BUTT-ENTRIES. E. & M. J., vol. 86, p. 17. 1 column.

DRIVING HEADINGS IN ROCK TUNNELS. By W. L. Saunders. T. A. I. M. E., vol. 40, p. 432. 27 pages. I.

See also **DRAINAGE TUNNELS and COST OF TUNNELING.**

Examples of Tunnels

ARRANGEMENT OF HOLES IN DRIVING THE ROOSEVELT TUNNEL. M. & M., vol. 29, p. 388. I.

FAST TUNNEL DRIVING. E. & M. J., vol. 86, p. 1199. ½ column.

- FAST TUNNEL DRIVING.** M. & M, vol 31, p. 9. 1 column. I.
- FAST DRIFT WORK ON THE RAND.** E. & M. J, vol 87, p. 495. 1½ columns.
- FAST DRIVING AT THE GOLDFIELD CONSOLIDATED MINES.** By C T. Rice. E & M J., vol. 90, p. 1246. 3½ columns.
- FAST TUNNEL DRIVING.** Min & Sci. Press, vol 100, p. 896. 1 column.
- RECORD DRIVING IN THE RAND DEEP LEVELS** By E. M. Weston. E. & M. J, vol 85, p. 1257. ½ column.
- RECORD IN DRIVING DRIFT IN SOUTH AFRICA.** Min. & Sci. Press, vol 97, p 19 ½ column
- TUNNEL DRIVING RECORDS.** By R. L. Herrick. M. & M., vol. 29, p. 422. 8½ columns.
- AMERICAN RECORD IN TUNNEL DRIVING.** E. & M. J, vol. 89, p. 1311. 1½ columns
- A WORLD'S RECORD IN TUNNEL DRIVING:** The Los Angeles Aqueduct. By B. A. Kenly. Min. & Sci Press, vol 99, p. 589. 3 columns I.
- ROOSEVELT TUNNEL, CRIPPLE CREEK** By R L Herrick. M. & M., vol. 29, p. 387. 9½ columns. I.
- DRILLING IN THE ROOSEVELT TUNNEL.** M. & M, vol. 29, p 388 1½ columns. I.
- See also **MACHINE OR POWER DRILLS.**
- UTAH METAL COMPANY TUNNEL.** By L A Palmer. M & M, vol. 31, p. 296. 2½ columns. I.
- TUNNEL OF THE UTAH METAL MINING COMPANY.** E. & M. J., vol. 89, p. 1269. 1½ columns
- TUNNELING ON LOS ANGELES AQUEDUCT** By R L. Herrick. M. & M., vol. 31, p. 135. 16½ columns. I
- THE ELIZABETH TUNNEL.** By W C. Aston. M & M., vol 31, p. 102. 6 columns. I.
- HOLYWELL-HALKYN TUNNEL AND MINES, HOLYWELL, NORTH WALES.** By J. P. Jones. T. I. M. E., vol. 36, p 197. 5 pages I
- MINING OPERATIONS IN NEW YORK CITY AND VICINITY** By H. T. Hildage T. A. I. M E., vol. 38, p. 360. 38 pages. I.
- TUNNELS UNDER THE CHICAGO RIVER FOR ELECTRIC CABLES** By G B. Springer. J W. Soc E, vol. 13, p. 41. 30 pages. I.
- VIDLER TUNNEL, COLORADO** E. & M. J, vol 88, p. 515. ½ column
- THE LARAMIE TUNNEL** By R. L. Herrick M. & M., vol 30, p. 541. 3 columns. I.
- ALPINE AND AMERICAN TUNNEL RECORDS.** Min & Sci. Press, vol 96, p 781. 1 column Table.
- See also **DRAINAGE TUNNELS and COST OF TUNNELING.**

Tunneling Machines

- TUNNELING MACHINES.** E. & M. J., vol 90, p 1144. 1 column.
- TUNNELING MACHINES** T. A I. M. E., vol 40, p. 453. 6½ pages.
- A NEW TUNNELING MACHINE.** Min. & Sci. Press, vol. 22, p. 153. 4 columns I.
- PRACTICAL TEST OF A TUNNEL BORING MACHINE.** By J. Tyssowski. E. & M J., vol. 87, p. 1296 4 columns. I.
- THE KARNS TUNNELING MACHINE.** By R. L. Herrick. M. & M., vol. 29, p 110. 2½ columns. I.
- TRIAL OF THE KARNS TUNNELING MACHINE** E. & M. J., vol. 87, p. 297 1 column.

See also **METHODS OF TUNNELING.**

MINE VENTILATION

Methods of Ventilating Mines, Splitting Air Currents, Etc.

MINE VENTILATION By H J. Nelmes. E. & M. J., vol 88, p. 782. 1½ columns. I.

MINE VENTILATION By T. W. Fitch and J. R. McColl. M. & M., vol 30, p. 590. 1½ columns.

MINE VENTILATION. By A. Del Mar. E. & M. J., vol. 85, p. 1043. 3½ columns.

METHOD OF VENTILATING THE LIGNITE MINES OF ITALY. E. & M. J., vol. 89, p. 1178. 2½ columns.

IMPROVED METHODS IN MINE VENTILATION. E. & M. J., vol 86, p. 1059. 1½ columns.

THE VENTILATION OF MINES AND COLLIERIES. By J. Phillips. Min. Mag., vol 3, p. 3, 13 pages, I.; p. 268, 13 pages; p. 377, 7 pages, vol 4, p. 1, 16 pages, p. 257, 14 pages.

THE VENTILATION OF MINES By J. K. Blackwell. Min. Mag., vol 2, p. 156, 10 pages, p. 286, 3 pages.

VENTILATION OF MINES Min. Mag., vol 9, p. 53. 3 pages.

ON THE GASES AND VENTILATION OF MINES. Min. Mag., vol 9, p. 316, 6 pages; p. 424, 5 pages.

DATA ON COAL MINE VENTILATION E. & M. J., vol. 87, p. 757. 2½ columns.

VENTILATING SYSTEM AT THE COMSTOCK MINES, NEVADA By G. J. Young. T. A. I. M. E., vol 41, p. 3. 55 pages. I.

METAL MINE VENTILATION. By E. W. Buskett. M. & M., vol. 31, p. 19. ½ column. I.

METAL MINE VENTILATION. M. & M., vol. 31, p. 337. 3½ columns.

METAL MINE VENTILATION. M. & M., vol. 30, p. 662. 3½ columns.

MINE VENTILATION. Water-jet and Air-jet Systems. E. & M. J., vol 89, p. 1189. 1 column. I.

NECESSITY FOR ATTENTION TO VENTILATION AND SANITATION OF MINES. P. C. M. & M. Soc. S. A., vol 6, p. 256. 5 columns.

VENTILATION SYSTEM AT THE COMSTOCK MINES By G. J. Young. E. & M. J., vol 88, p. 1016. 9 columns. I.

THE COOLING OF MINES. By B. A. Smith. T. A. I. M. E., vol. 12, p. 63. 6 pages.

THE VENTILATION OF FACTORIES P. C. M. & M. Soc. S. A., vol 9, p. 136. 3½ columns.

THE ECONOMY OF MODERN COLLIERY VENTILATION By J. R. Robinson. E. & M. J., vol 85, p. 1010. 12 columns.

See also **COST OF VENTILATION**

Mechanical Ventilators: Fans, Their Construction and Use

UNDERGROUND VENTILATORS IN THE COMSTOCK MINES Min. & Sci. Press, vol 100, p. 419. ½ column.

AIR CONDITIONING APPARATUS: Preparing Air for Various Uses. By W. H. Carrier. P. E. Soc. W. Pa., vol. 26, p. 203. 30 pages. I.

MINE VENTILATING FANS. By J. R. McColl. M. & M., vol. 30, p. 729. 2½ columns. I.

PROPORTIONING FANS TO MINES. By T. W. Finch and J. R. McColl. M. & M., vol 30, p. 700. 3½ columns. I.

PRESSURE-FANS VS. EXHAUST-FANS. By A. H. Stow. T. A. I. M. E., vol 40, p. 398, 14½ pages; Discussion, p. 874, 4½ pages.

DETAILED CONSTRUCTION OF HIGH-SPEED FAN FOR LARGE VEIN. E. & M. J., vol. 89, p. 428. I.

A NEW MINE FAN: Jeffrey Centrifugal Fan. E. & M. J., vol. 85, p. 369. 1 column. I.

A NEW VENTILATING FAN FOR MINES. By M. C. Mitchell. M. & M., vol. 30, p. 221. 2½ columns. I.

THE SQUIRREL CAGE FAN FOR MINE VENTILATION. E. & M. J., vol. 89, p. 674. 2 columns. I.

WIDTH OF FAN BLADE. M. & M., July, 1902, p. 569

BENEFITS OF AN AUXILIARY FAN. By H. M. McAlarney and W. H. Kephart. M. & M., vol. 29, p. 354. 1½ columns. I.

THE ROTARY BLOWER IN SMELTING WORKS. By G. C. Hicks, Jr. E. & M. J., vol. 87, p. 352. 10½ columns. I.

See also **METHODS OF VENTILATING MINES AND COST OF VENTILATION.**

Effect of Size and Shape of Air Ways in Ventilation, Etc.

See first volume of INDEX.

Quantity of Air Needed in Mines

NEED OF THOROUGH VENTILATION IN COAL MINES. By J. R. Robinson. E. & M. J., vol. 85, p. 963. 4½ columns.

MINE VENTILATION: Quantity of Air Necessary, Report. P. C. M. & M Soc S. A., vol. 7, p. 85. 1 column

NOTE ON THE DAILY VARIATION OF RAND MINE VENTILATION. By J. Moir. P. C. M. & M. Soc. S. A., vol. 8, p. 138, 5½ columns; p. 278, 4½ columns.

See also first volume of INDEX

Stoppings, Doors, Overcasts and Regulators in Mines

SELF-OPERATED MINE DOOR. E. & M. J., vol. 85, p. 1154. 1 column. I.

THE POCAHONTAS AUTOMATIC MINE DOOR By A. H. Stow. E. & M. J., vol. 86, p. 862. 1½ columns. I.

SELF-ACTING MINE DOORS. E. & M. J., vol. 88, p. 1237. 1 column. I.

EXTRA MINE DOORS. M. & M., vol. 31, p. 216. ¾ column. I.

LATH STOPPINGS FOR COAL MINES. E. & M. J., vol. 90, p. 872. ½ column. I.

VENTILATING CURRENTS AND STOPPINGS. By J. Duncan. M. & M., vol. 30, p. 691. ½ column.

AIR-TIGHT STOPPINGS FOR USE DURING UNDERGROUND FIRES. By R. V. Spier. T. A. I. M. E., vol. 13, p. 138. 3½ pages. I.

See also **MINE FIRES**

OVERCASTS IN COAL MINES. E. & M. J., vol. 86, p. 1106. ½ column. I.

See also **COST OF VENTILATION.**

Measurement of Air Currents

MEASUREMENT OF VENTILATING CURRENTS IN THE COMSTOCK MINES, NEVADA T. A. I. M. E., vol. 41, p. 40. 2 pages.

See also first volume of INDEX.

Tests on Fans

METHOD OF TESTING A FAN. E. & M. J., vol. 85, p. 1013. 1½ columns.

TEST OF A WADDLE FAN. By G. L. Kerr. M. & M., vol. 30, p. 294. 4½ columns. I.

MINE FAN TESTS. P. C. M. & M. Soc. S. A., vol. 7, p. 306. 1 column.

See also first volume of INDEX

Efficiency of Fans

See first volume of INDEX.

Application of Ventilating Methods to Metal and Coal Mines

VENTILATION AT BENDIGO, AUSTRALIA. Min. & Sci. Press, vol. 93, p. 601. ½ column

VENTILATION IN DEEP MINES. Min. & Sci. Press, vol. 93, p. 629. 2 columns.

See first volume of INDEX.

WATER

Source and Supply of Water

AMOUNT OF FREE WATER IN THE EARTH'S CRUST. M. & M., vol. 29, p. 539. $\frac{1}{2}$ column.

VOLCANIC WATERS. By J. H. Hastings. Min. & Sci. Press, vol. 97, p. 229. 6 columns.

See also **AIR-BLASTS, VOLCANOES, AND EARTHQUAKES.**

WATERS, METEORIC AND MAGMATIC. By J. F. Kemp. Min. & Sci. Press, vol. 96, p. 705, $6\frac{1}{2}$ columns; p. 872, $6\frac{1}{2}$ columns, I.

UNDERGROUND WATERS AND SEMI-ARID REGIONS. By W. C. Mendenhall. Min. & Sci. Press, vol. 99, p. 496. 1 column.

RATIO OF MINE WATER TO RAINFALL. M. & M., vol. 29, p. 248. $\frac{1}{2}$ column.

PRINCIPLES AND CONDITIONS OF THE MOVEMENTS OF GROUND WATER. By F. H. King. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 59-294. 1897-98. I

THEORETICAL INVESTIGATION OF MOTION OF GROUND WATERS. By C. S. Slichter. U. S. G. S., 19th Ann. Rept., pt. 2, pp. 295-384. 1897-98 I

See also **THEORY OF ORE DEPOSITS, ETC.**

WATER SUPPLY FOR KALGOORLIE. By M. W. Von Bernewitz. Min. & Sci. Press, vol. 96, p. 709. $2\frac{1}{2}$ columns.

NEW WATER SUPPLY FOR GOLDFIELD. E. & M. J., vol. 85, p. 306. $1\frac{1}{2}$ columns.

WATER LOSSES AT BROKEN HILL. By T. H. Palmer. E. & M. J., vol. 87, p. 851. 5 columns.

REQUISITE AND QUALIFYING CONDITIONS OF ARTESIAN WELLS. By T. C. Chamberlin. U. S. G. S., 5th Ann. Rept., pp. 125-173. 1883-84. I.

PRELIMINARY REPORT ON ARTESIAN WATERS OF A PORTION OF THE DA-

KOTAS. By N. H. Darton. U. S. G. S., 17th Ann. Rept., pt. 2, pp. 603-694. 1895-96. I.

THE CRETACEOUS FORMATIONS OF TEXAS WITH SPECIAL REFERENCE TO ARTESIAN WATERS. By R. T. Hill. U. S. G. S., 21st Ann. Rept., pt. 7, 666 pages. 1899-1900. I.

ARTESIAN WELL PROSPECTS IN THE ATLANTIC COASTAL PLAIN REGION. By N. H. Darton. U. S. G. S., Bull. 138. 232 pages. I. 1896.

CONTROLLING FACTORS OF ARTESIAN FLOWS. By M. L. Fuller. U. S. G. S., Bull. 319. 46 pages. 1908.

THE ARTESIAN WELL AT CHARLESTON. By R. N. Lynch. Min. Mag., vol. 1, p. 251. $5\frac{1}{2}$ pages.

A WATER POWER RECONNAISSANCE IN SOUTHEASTERN ALASKA. By J. C. Hoyt. U. S. G. S., Bull. 442, p. 147. 11 pages. I. 1909.

WATER SUPPLY OF THE YUKON-TANANA REGION, 1909. By C. E. Ellsworth. U. S. G. S., Bull. 442, p. 251. 33 pages. 1909.

WATER SUPPLY INVESTIGATIONS IN SEWARD PENINSULA. By F. F. Henshaw. U. S. G. S., Bull. 379, p. 370, 32 pages, 1908; Bull. 442, p. 372, 44 pages, 1909.

WATER SUPPLY OF THE YUKON-TANANA REGION, 1907-1908. By C. C. Covert and C. E. Ellsworth. U. S. G. S., Bull. 379, p. 201. 28 pages. 1908.

UNDERGROUND WATERS OF BISBEE, ARIZONA. Min. & Sci. Press, vol. 99, p. 360. $\frac{3}{4}$ column.

GEOLOGY AND UNDERGROUND WATER RESOURCES OF NORTHERN LOUISIANA AND SOUTHERN ARKANSAS. By A. C. Veatch. U. S. G. S., Professional Paper 46. 422 pages. I. 1906.

SIXTY YEARS OF RAINFALL IN CALIFORNIA. By A. G. McAdie. Min. & Sci. Press, vol. 101, p. 640. 3 columns. D.

- WATER CONDITIONS IN THE OIL FIELD AT COALINGA.** By R P McLaughlin. Min & Sci Press, vol. 101, p. 305. 2 columns.
- UNDERGROUND WATER OF THE ARKANSAS VALLEY IN EASTERN COLORADO.** By G. K Gilbert U. S. G. S., 17th Ann. Rept., pt. 2, pp. 551-601. 1895-96. I
- GEOLOGY AND UNDERGROUND WATERS OF THE ARKANSAS VALLEY IN EASTERN COLORADO** By N. H. Darton. U. S. G. S., Professional Paper 52, 90 pages. I 1906.
- GEOLOGY AND WATER RESOURCES OF THE SNAKE RIVER PLAINS OF IDAHO.** By I. C Russell U. S. G. S., Bull. 199. 192 pages. I. 1902.
- WATER RESOURCES OF ILLINOIS.** By F. Leverett. U S G S., 17th Ann Rept., pt 2, pp. 695-849. 1895-96. I.
- WELL WATERS OF OHIO AND INDIANA.** By F. Leverett. U. S. G S., 18th Ann Rept., pt. 4, pp. 419-560. 1896-97. I
- PRELIMINARY REPORT ON GEOLOGY AND WATER RESOURCES OF NEBRASKA WEST OF THE ONE HUNDRED AND THIRD MERIDIAN.** By N. H. Darton. U. S. G. S., 19th Ann. Rept., pt. 4, pp 719-735. 1897-98. I
- PRELIMINARY REPORT ON THE GEOLOGY AND WATER RESOURCES OF CENTRAL OREGON** By I. C. Russell. U. S. G S., Bull. 252 138 pages. I. 1905
- PRELIMINARY DESCRIPTION OF THE GEOLOGY AND WATER RESOURCES OF THE SOUTHERN HALF OF THE BLACK HILLS AND ADJOINING REGIONS IN SOUTH DAKOTA AND WYOMING.** By N. H. Darton. U. S. G S., 21st Ann. Rept., pt. 4, pp. 489-599. 1899-1900. I
- THE GEOLOGY AND WATER RESOURCES OF THE BIGHORN BASIN, WYOMING.** By C. A. Fisher. U. S G S., Professional Paper 53. 72 pages. I. 1907.
- GEOLOGY AND WATER RESOURCES OF THE NORTHERN PORTION OF THE BLACK HILLS AND ADJOINING REGIONS IN SOUTH DAKOTA AND WYOMING.** By N H Darton U. S. G S., Professional Paper 65. 105 pages. I. 1909.
- NATURAL MINERAL WATERS OF THE UNITED STATES.** By A. C. Peale. U. S. G S., 14th Ann Rept, pt. 2, pp. 49-88. 1892-93. I.
- PALATABLE WATERS OF EASTERN UNITED STATES.** By W. J McGee. U. S G S., 14th Ann. Rept, pt. 2, pp. 1-47. 1892-93.
- THE PUBLIC LANDS AND THEIR WATER-SUPPLY.** By F. H Newell. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 457-533. 1894-95. I.
- WATER RESOURCES OF A PORTION OF THE GREAT PLAINS.** By R. Hay. U. S. G. S., 16th Ann. Rept., pt. 2, pp. 535-538 1894-95. I.
- GEOLOGY AND UNDERGROUND WATER RESOURCES OF THE CENTRAL GREAT PLAINS.** By N. H Darton U. S. G. S., Professional Paper 32. 433 pages. I 1905.
- WATER SUPPLY FOR IRRIGATION.** By F H Newell. U S G. S., 13th Ann. Rept., pt. 3, pp. 1-99. 1891-92. I.
- A NOTE ON ALLEGHENY RIVER WATER.** By F C Phillips P. E. Soc W. Pa, vol 2, p. 279. 4½ pages. D.
- PECULIAR WATER PROBLEM AT CANDELARIA MINES, CHIHUAHUA, MEXICO.** By G A. Laird E & M. J., vol. 90, p 658. 5 columns.
- TAILING DAMS AND CONSERVATION OF MILL WATER** By W. H. Storms. E. & M. J., vol 90, p. 266. 7 columns. I
- See also DAMS FOR MINING PURPOSES and CONSERVATION.
- Measurement of Water**
- DISCHARGE FORMULAS FOR CAST IRON PIPE.** By G. L Bean. Min & Sci Press, vol 98, p. 666. 2½ columns. Table.

SOLUTION OF KUTTER'S FORMULA.
By L. I. Hewes and J. W. Roe. Min
& Sci Press, vol. 99, p. 429. 2½ col-
umns. I.

**A GRAPHIC SOLUTION OF KUTTER'S
FORMULA.** By L. I. Hewes and
Joseph W. Roe. T A. I M E,
vol. 40, p. 231. 15½ pages. I.

RESULTS OF STREAM MEASUREMENTS.
By F. H. Newell U. S. G S,
14th Ann. Rept, pt. 2, pp. 89-155.
1892-93. I.

WEIR MEASUREMENT OF WATER Min.
& Sci Press, vol. 99, p. 265. 3 col-
umns. Tables.

**VELOCITY OF FLOW OF WATER IN
PIPES** By L. M. Green. Min &
Sci. Press, vol. 99, p. 157. 3½ col-
umns.

TABLE OF WATER GAUGES. E & M
J., vol. 87, p. 1130 1 column

WEIGHT OF WATER PER CUBIC FOOT.
By C. D. Demond Min. & Sci
Press, vol 95, p. 620. 2 columns.
Table.

See also **WEIGHTS AND MEASURES**

Pollution and Purification of Water

**THE POLLUTION OF STREAMS BY SPENT
GAS-LIQUORS FROM COKE OVENS,
AND THE METHODS ADOPTED FOR ITS
PREVENTION.** By H. M. Wilson.
T. I. M. E., vol. 39, p. 71. 24
pages. I.

**ADMINISTRATION OF PENNSYLVANIA
LAWS RESPECTING STREAM POLLU-
TION.** By F. H. Snow P. E Soc.
W Pa., vol. 23, p. 266. 17½ pages.

**NOTE ON A DEPOSIT OF SULPHUR IN A
COLLIERY WATER** By G H. Stan-
ley. T I. M. E., vol. 36, p. 223.
4 pages.

MINERAL IN UNDERGROUND WATERS.
Min. & Sci Press, vol 95, p. 590.
1½ columns

See also first volume of INDEX.

Water in Milling

**WATER REQUIRED PER TON OF ORE
TREATED** M & M, vol. 29, p 407.
½ column

**WATER REQUIRED FOR CONCENTRAT-
ING MACHINERY.** M. & M., vol. 29,
p. 380. ½ column

**WATER REQUIRED FOR CONCENTRAT-
ING MACHINERY** P. C. M & M.
Soc S. A., vol. 10, p. 23. ½ column.

**NOTES ON THE STAMP MILL WATER
FEED AND PACKED UP DIES INTRO-
DUCING THE SHALLOW FRONT MOR-
TAR BOX.** By H T. Pitt. P C M.
& M Soc. S A., vol. 8, p. 373. 6½
columns. I.

SALT WATER IN STAMP MILLS By
T. A. Rickard Min. & Sci. Press,
vol. 98, p. 860. 3½ columns.

See also **COST OF WATER.**

LIST OF PUBLICATIONS INDEXED

Publications, indexed (abbreviations)	Volumes indexed in first volume of Index (inclusive)	Volumes indexed in second volume of Index (inclusive)	Remarks
Am Jour Min .	1-7		See E & M. J
Coll Engr	14-17		{ See Coll Engr & Met Miner and M. & M.
Coll. Engr & Met. Miner Engineering, London	8-13		See Coll Engr
	63-79	. . .	{ For mining subjects only
E. & M J .	8-84	85-90	{ Formerly Am Jour. Min.
J C M. I	1-9	10-13 except 12	
J. C & M Soc S. A	1-4		{ See P C M. & M Soc. S A
J W Soc E	1-11	12-15	{ For mining subjects only
J. M Soc N S .	{ 1-9 except 4, 5 and 6 }	{ 10-15 also 4 and 6 }	
Min. Mag (old series)		1-10	Discontinued
Min Mag (new series)	11-13		Discontinued
Min Mag, London	1-4	
M & M. . .	18-28	29-31	Formerly Coll Engr
Min & Sci Press....	{ 13-24 except 15, 20, 22 and 24 }	{ 95-101 also 20 and 22 }	
P C M. & M. Soc. S. A.	5-6	7-10	See J. C & M Soc S A
P E Soc. W Pa.	{ 1-22 except 2 and 3 }	{ 23-26 also 2 and 3 }	{ For mining subjects only
P. Soc P E. E. . . .	1-10	11-17	
Sch Mines Quart	1-28	28-31	
T. A. I. M. E. . .	1-37	38-41	
T. Au I M. E....		1-13	
T I M E	1-35	36-39	{ Was formerly called the T F I M E
T I. M & M. .	1-16	17-19	
T. L. S. M. I.	1-12	13-15	
T N. S I. M & M E.	1-10		
T. F. C M I.	1-6	{ Not available for indexing
U. S. G. S. Publication.	{ Partially indexed }	{ Completed to Jan 1, 1911 }	{ Water supply papers not indexed }

INDEX

It has been found impracticable to index all subjects considered in the references given in this work, but it is hoped that the present index will prove to be amply exhaustive to give ready access to any desired information.

Under Districts the countries, states, etc., as well as the various materials are grouped in alphabetical order, and similarly under Geology and Ore Deposits, which is evident on careful examination, although it is not always indicated by the subheadings.

- Abandoned mines, 387, 388.
- Accidents in mining, 1
 - avalanches, 17.
 - cause of accidents, 2
 - chambers of refuge, 12.
 - coal dust, 8
 - compensation, 6.
 - costs of, 50
 - earth and snow slides, 17.
 - fall of roof and walls, 7.
 - first aid to injured, 7.
 - health of miners, 304.
 - hoisting accidents, 17.
 - inundation of mines, 8.
 - lightning entering mines, 17.
 - loss of life in mining, 1.
 - mine explosions, 14, 17.
 - mine fires, 12.
 - poisoning and injuries, 17.
 - powder explosions, 17
 - protection in mines, 3.
 - rescue work in mines, 4.
 - spontaneous combustion, 4.
- Accounts, 310
- Acetylene gas, 359.
- Acid manufacture, 23.
- Acts, land, 356.
- Administration, 308.
- Africa, see Districts.
- Air blasts, 233
 - compressors, 28.
 - compressed, 28, 297.
 - hammer drills, 184.
 - quantity needed, 420.
- Air-currents, measurement of, 420.
- splitting, 419.
- Alabama, see Districts
- Alaska, 218; see Districts.
- Alloys of iron, 345.
- Aluminum, 289, 345.
- Amalgamation, 34, 35, 36.
- Amber, 349
- Amortization, 311.
- Analysis, mineral, 23.
 - coal, 26.
 - electrolytic, 27.
 - gold and silver, 24.
 - in cyaniding, 25.
- Animals in mines, 18.
 - haulage, 296.
 - mine stables, 18.
- Antimony, 240.
 - determination of, 24.
- Apatite, see Geology.
- Apex law, 357.
- Apparatus employed in sampling, 407.
 - for boring, 188.
- Appliances for hoisting, 299.
- Application of mining law, 355.
 - of power, 396.
 - ventilation methods, 420.
- Apprenticeships, 306.
- Argentine Republic, see Districts.
- Arizona, see Districts.
- Arkansas, see Districts.
- Arrangement of holes in blasting, 20.
- Arsenic, 240.
 - determination of, 24.
- Asbestos, 240, 349.
- Asia, see Districts.
- Asphalts, 240.
- Asphaltum compounds, 349.

- Assaying, 315.
- Assessments of claims, 357
- At the face, machinery, 694.
- Atmosphere of mines, 352.
- Auriferous gravels.
- Australia, 218, see Districts.
- Austro-Hungary, see Districts.
- Avalanches, 17.
- Bailing water, 182.
 - costs of, 98.
- Ball mills, 404
- Barometric pressure, 354.
- Barites, 241.
- Barrier pillars, 392.
- Bauxite, see Geology.
- Beach mining, 380.
- Bearings for machinery, 388.
- Belgium, see Districts.
- Belts, 388.
- Bessemerizing copper matte, 323.
- Bismuth, 241
 - determination of, 22.
- Blasting in mines, 18.
 - arrangement of holes, 20.
 - charging, 19.
 - compressed air in blasting, 20.
 - costs of, 50, 60
 - firing, 19.
 - in coal mines, 19.
 - in metal mines, 19.
 - large or mammoth blasts, 20.
 - lime blasting, 20
 - methods of blasting, .
 - quantity of explosive, 20.
 - submarine blasting, 20.
 - tamping and materials, 20.
- Blowers of gas, 354.
- Blue-printing, 202
- Bog houses, 342.
- Boilers, 396.
 - calculation of, 397.
 - compounds for, 398.
 - explosions of, 17.
 - feed-water, 397.
 - heaters, 398.
 - horse-power of, 397.
 - steam, 396.
 - tests, 397
- Bolivia, see Districts.
- Book-keeping, 310
- Borax, 241; see Geology.
- Bore holes, 185.
 - surveying, 188
- Boring, 183.
- Brakes for hoisting, 301.
- Brazil, see Districts
- Breakage of ropes, 406
- Breaking coal at face, 373.
- Brick, 30.
- Briquetting of fuels, 213.
- British Columbia, 218; see Districts
- Bucket dumps, 194
- Buckets for hoisting, 301
- Building stone, 241
- Buildings, mine and mill, 350
- Buying coal, 211.
 - ore, 310
- Bureau of mines, 360
- Cable ways, construction and use, 416.
- Cage keeps or chairs, 302.
- Cages for hoisting, 194, 301.
- Calculations, metallurgical, 315.
 - for hoisting, 299.
- California, 219.
- Camping outfits, 363.
- Canada, 219; see Districts.
- Canals, 416.
- Candles, 359.
- Capacity of mine cars, 415.
- Carborundum, 349.
- Care of rope, 406.
- Carolinas, see Districts.
- Cars, capacity of, 297, 415.
- Cause of accidents, 2
- Caverns, 233
- Caving system of mining, 375.
- Cement, properties of, 46.
- Cement rocks, 242
- Cementation, 393
- Central America, see Districts.
- Central power plant, 398.
- Centrifugal concentration, 78.
- Chains, 302.
- Chairs for cages, 302.
- Chambers of refuge, 12.
- Changing houses, 307
- Charging in blasting, 19.
- Characteristics of coal, 209.
- Chemistry, 20.
 - acid manufacture, 23.
 - antimony, determination of, 24.
 - arsenic, determination of, 24.

- Chemistry: bismuth, determination of, 20.
 coal analysis, 26.
 cobalt, determination of, 26.
 copper, methods of analysis, 26.
 costs of, 52.
 cyaniding, chemical analysis in, 25.
 electrolytic analysis, 27.
 general, 20
 gold analysis, 24.
 iron, methods of determining, 27.
 lead, determination of, 25.
 lime analysis, 41
 manganese, determination of, 38.
 mercury, determination of, 20.
 mineral analysis, 23.
 molybdenum, determination of, 20.
 nickel, determination of, 26.
 paint manufacture, 24.
 silver analysis, 24.
 sulphur, determination of, 24.
 tellurium, determination of, 20.
 tin, determination of, 26
 tungsten, determination of, 26.
 wolfram, determination of, 20.
 zinc, determination of, 25.
- Chile, see Districts.
 Chili, see Districts.
 Chimneys, 342
 China, see Districts
 Chlorination process, 334.
 costs of, 53.
 Churn drills and drillings, 186.
 Chutes, 294.
 Claims, mining, 357, 413.
 Classification of minerals, 39.
 Classifiers, 39.
 Clays, 29, 242.
 brick, 30.
 methods of testing, 29.
 products, 30.
 properties of, 29.
 uses of, 29.
- Clips, rope, 298.
 Clubs, miners', 307.
 Coal, 30, 243.
 analysis, 26.
 composition, 209
 costs of coal mining, 82.
 costs of metal mining, 85.
 decomposition, 209.
 dust, 8.
 Coal: for mine support, 391
 practice in sampling, 408
 preparation of, 30.
 storing, 295
 trade, 192.
 washing, 38.
 weighing, 275
 Cobalt, determination of, 26.
 Codes for signaling, 411.
 Coke, 210.
 Colombia, 155; see Districts.
 Colorado, 219, see Districts.
 Compensation to miners, 6.
 Composition of coal, 209.
 Compressed air, 28
 compression of air, 29.
 compressors, 28
 diseases, 29.
 explosions in compressors, 29.
 for signaling, 411
 haulage, 29, 297.
 hydraulic compressors, 29.
 in blasting, 20.
 operations, 28.
 pumping, 181
 regulators, 28, 29
 transmission of power by, 401.
 types of compressors, 28.
- Compression of air, 28
 Concentration, 30.
 amalgamation of gold, 34.
 amalgamators, 34.
 buddles, 37
 classifiers, 39
 concentrators, 37.
 costs of, 81, 88.
 disposal of waste, 39.
 dry concentration, 41
 electrostatic separation, 36.
 flotation processes, 33.
 flow sheets, 34
 gold amalgamation, 34.
 hand dressing, 33.
 hand tests, 39
 jigs and jigging, 32
 launders and distributors, 32.
 magnetic separation, 36
 mercury and amalgamation, 34.
 pan amalgamation, 36.
 patio amalgamation, 36.
 plates in amalgamation, 35.
 practice in milling, 42, 88.

- Concentration: preparation of coal, 30.
 - salt making, 42.
 - sand treatment, 41.
 - silver amalgamation, 34.
 - slime treatment, 40
 - sorting, 33.
 - tables, 37.
 - testing plants and laboratories, 31.
 - theory of concentration, 31
 - washing coal and mineral, 38.
- Concentrators, 37.
- Concrete, 46
 - characteristics of, 46.
 - manufacture of, 46.
 - mortars and plasters, 46.
 - properties of, 46.
 - use of, in mines, 47.
 - uses of, 46.
- Condensers, 398.
- Conditions affecting support, 699.
- Connecticut, see Districts.
- Conservation, 190.
- Construction of dams, 116.
- Consumption of coal, 398.
 - of steam, 398.
- Contract systems, 307
- Conveyors for mineral and coal, 49.
 - costs of, 92.
 - kinds of, 49.
 - loading and unloading for vessels and cars, 49.
 - operation of, 49.
 - underground, 49.
- Copper, 34, 346; see Geology.
 - determination of, 26
 - metallurgy of, 318.
- Copper trade, 191.
- Cornish pumps, 181
- Correspondence schools, 200.
- Corundum, 349.
- Cost of various operations, 49.
 - hauling, 98.
 - blasting, 50, 60
 - charges, 100.
 - chemistry, 52.
 - chlorination, 53.
 - coal mining, 82.
 - conveyors, 92.
 - cyaniding, 50.
 - dams, 54.
 - depreciation, 70.
 - development, 53.
 - Cost of various operations: drainage, 54.
 - dredging, 54.
 - drilling and boring, 55
 - elevators, 92
 - excavating, 59
 - explosives, 60.
 - flume and ditch construction, 61.
 - fuel, 61.
 - handling, 63.
 - haulage, 63.
 - hoisting, 66
 - hydraulic mining, 67.
 - keeping, cost, 67.
 - labor, 67.
 - lighting, 70.
 - maintenance, 70.
 - metal mining, 85.
 - metallurgical treatment, 70, 81.
 - milling, 81, 88
 - mine examination, 74.
 - mine and mill construction, 74.
 - mining, 76, 82, 85
 - ores and minerals, 92
 - packing, 93
 - pipes and pipe laying, 93
 - portage, 93
 - power, 93.
 - preserving timber, 98.
 - production, 97.
 - prospecting, 98.
 - pumping, 98
 - reduction, 99.
 - rope, 100.
 - royalties, 100.
 - sampling, 101.
 - shaft sinking, 101.
 - signaling, 103.
 - sizing, 103.
 - sorting, 103.
 - stopping, 103.
 - storing, 63.
 - stripping, 104.
 - supplies, 104.
 - support, 104.
 - surveying, 107
 - tramming, 107
 - tramways, 107
 - transportation, 108.
 - tunneling, 112.
 - ventilation, 115.
 - washing coal and ores, 115.
- Counterbalancing in hoisting, 300.

- Countries, maps of, 312.
 laws of, 355.
 Couplings, 298.
 Cradles, 194.
 Cross-heads, 302.
 Crushers, 402.
 construction of, 402.
 operation of, 402.
 Cryolite, see Geology.
 Culm, use of, 379.
 Cyanide poisoning, 17.
 Cyaniding, 325.
 chemical analysis in, 42.
 costs of, 50.
 plants, 334.
- Damages from debris, 387.
 Dams for mining purposes, 116.
 construction of, 116.
 costs of, 54.
 description of, 116.
 stability of, 116.
 stresses in, 116.
 underground, 117.
 Débris, mining, 387.
 Decisions, 358.
 Deep drilling, 187.
 mining, 380.
 winding, 300.
- Deposits of ore and fuel, 215.
 alum and aluminum, 142, 239.
 amber, see Geology.
 antimony, 129, 240.
 apatite, see Canada.
 arsenic, 163, 240.
 asbestos, 177, 240.
 asphalts, 174, 176, 240.
 barites, 147, 175, 176.
 bismuth, 241.
 borax, 135, 172.
 building stone, 118, 128, 168, 172.
 cement rocks, 158, 170, 175, 177.
 clays, 117, 122, 129, 147, 149, 151, 164, 166, 170.
 coal, 117, 120, 125, 130, 131, 135, 138, 141, 142, 143, 147, 148, 149, 150, 157, 161, 163, 165, 166, 168, 170, 171, 172, 174, 175, 176, 177.
 copper, 117, 120, 125, 128, 131, 142, 147, 148, 150, 158, 161, 169, 172, 174, 176, 177, 178.
 diamonds, 117, 120, 130, 133, 135, 172.
- Deposits of ore and fuel: diatomaceous earth, 258.
 emeralds, 282.
 fluorspar, 118, 151.
 fuller's earth, 118.
 gas, 118, 119, 177.
 glass sands, 118, 172, 177.
 gold and silver, 120, 126, 128, 131, 133, 135, 138, 141, 143, 144, 145, 146, 147, 152, 158, 159, 162, 164, 165, 168, 170, 176, 178.
 graphite, 151, 172, 178.
 gypsum, 136, 158, 164, 178.
 iron, 118, 122, 127, 136, 139, 153, 163, 164, 167, 170, 171, 174, 176, 177, 179.
 lead, 119, 145, 149, 151, 156, 171, 173, 175, 177.
 lignites, 146.
 manganese, 119, 133, 149, 169, 173, 175.
 mica, 179.
 monazite, 141.
 nickel, 166.
 nitrates, 239.
 ocher, 282.
 onyx, 282.
 peat, 127, 157, 173.
 petroleum, 119, 128, 132, 133, 137, 165, 169, 175, 177, 179.
 phosphates, 119, 132, 133, 171, 173, 175.
 platinum, 169, 179.
 quicksilver, 119, 130, 137, 170, 171.
 rare earths, 117, 171.
 rare metals, 117, 118.
 ruby, 282.
 salt, 133, 175, 179.
 sapphires, 282.
 silver, 140, 148, 154, 160, 162, 171, 173.
 slate, 147, 163, 173, 175.
 sulphur, 119, 156, 178, 179.
 theory of ore deposits, 234.
 tin, 119, 122, 128, 132, 133, 142, 166, 170, 172.
 tungsten, 120, 129, 138, 141, 145, 161.
 turquoise, 282.
 vanadium, 118, 168.
 wolframite, 293.
 zinc, 119, 133, 156, 161, 165.
- Depreciation of plants, etc., 311.
 costs of, 70.

- Descriptions of dams, 116.
- Design of mine cars, 297.
 - of constructions, 349.
- Detection of mine gases, 354.
- Determination of gas, 354.
 - of minerals, 346.
- Detonators, 207
- Development of mining industry, 188.
 - coal trade, 192
 - conservation, 190.
 - copper trade, 191.
 - costs of, 53.
 - economic features of mining, 188.
 - explosives, 206.
 - function of gold and silver, 190.
 - industrial features of mining, 188.
 - iron trade, 192
 - mining, 189, 365.
 - mining statistics, 189.
 - miscellaneous production, 193.
 - precious metal mining, 189
 - production of gold and silver, 189.
- Diamond drills, 187.
- Diamonds, 349; see Geology.
 - origin of, 349.
- Diatomaceous earth, 258.
- Difficulties in mining, 387.
- Dimensions of rooms, 373.
 - of shafts and slopes, 365.
- Discipline in mines, 306.
- Diseases, 304.
- Districts, mining, 117, 217.
 - Africa, 120, 244, 253, 257, 259, 273, 291.
 - Alabama, 122, 244, 273.
 - Alaska, 123, 218, 244, 253, 260, 283, 291
 - Argentine Republic, 128.
 - Arizona, 128, 253, 262, 288, 292.
 - Arkansas, 129, 257, 278, 286.
 - Asia, 130.
 - Australia, 130, 244, 254, 262, 273, 283, 291.
 - Austria-Hungary, 133.
 - Belgium, 133.
 - Bolivia, 133, 271, 291.
 - Brazil, 133, 258, 273.
 - British Columbia, 134, 244, 254, 263, 274, 286, 288.
 - Burma, 284.
 - California, 135, 219, 245, 254, 258, 263, 274, 284, 292.
 - Districts, mining: Canada, 138, 219, 245, 264, 274, 288, 292.
 - Carolinas, 141, 245, 291.
 - Central America, 141.
 - channels, 182
 - Chile, 141, 255.
 - China, 142, 245, 277, 289, 291.
 - Colombia, 142, 245, 265.
 - Colorado, 143, 245, 255, 266, 275, 277, 284, 292.
 - Connecticut, 145.
 - Dakotas, 146.
 - Delaware, 146.
 - East Indies, 146
 - Ecuador, see Districts.
 - Egypt, 146; see Districts.
 - England, 145, 266, 275, 277, 292.
 - Florida, 147, 286.
 - France, 147, 266.
 - Georgia, 147, 255, 267.
 - Germany, 148.
 - Greece, see Districts.
 - Guianas, 142, 265.
 - Honduras, see Districts.
 - Idaho, 148, 219, 292
 - Illinois, 148, 246, 284
 - India, 149; see Districts.
 - Indiana, 149, 247, 284.
 - Iowa, 149; see Districts.
 - Jamaica, 150, 219.
 - Japan, 150
 - Kansas, 150, 220.
 - Kentucky, 150, 247.
 - Korea, 267.
 - Lapland, see Districts.
 - Louisiana, 151, 284, 288.
 - Madagascar, see Districts.
 - Maine, 151, 220.
 - Malaysia, 146, 292.
 - maps of, 312.
 - Maryland, 151, 220.
 - Massachusetts, 151, 220.
 - Mexico, 151, 247, 255, 267, 275, 277, 278, 284, 288, 289.
 - Michigan, 156, 255, 275.
 - Minnesota, 156
 - Miscellaneous, 117.
 - Mississippi, 156, 220.
 - Missouri, 156, 220, 247, 278.
 - Montana, 157, 221, 247, 268.
 - Nebraska, 158.
 - New Caledonia, 161.

- Districts, mining: Nevada, 158, 256, 268, 275, 278, 285, 286, 290.
 Newfoundland, 161
 New Hampshire, 161
 New Hebrides, 161
 New Jersey, 161, 275.
 New Mexico, 161, 221, 249, 256, 269, 275, 277.
 New York, 163, 221, 275.
 New Zealand, 163, 218, 270.
 Nicaragua, 163, 270.
 North Dakota, 246.
 Norway, see Districts.
 Nova Scotia, 164, 270, 293.
 Ohio, 165
 Oklahoma, 165, 249, 270
 Oregon, 165, 221, 249, 270, 285.
 Panama, 166
 Pennsylvania, 166, 221, 249, 276, 285.
 Persia, 219.
 Peru, 168, 271, 292.
 Philippine Islands, 168, 250, 271.
 Portugal, 169.
 Rhode Island, 169.
 Russia, 169, 271.
 Scandinavia, see Districts.
 South America, 245.
 South Carolina, 245.
 South Dakota, 146, 266, 291, 292.
 Spain, 170; see Districts.
 Sweden, 170.
 Tasmania, 170.
 Tennessee, 170, 250, 271, 276, 286.
 Texas, 171, 221, 290.
 Turkey, 171, 250, 271.
 United States, 171, 250, 286, 291.
 Utah, 174, 256, 271, 276, 285, 291.
 Venezuela, 175, 291.
 Vermont, 175; see Districts.
 Virginia, 175, 222, 276, 278.
 Washington, 175, 221, 251, 271, 292.
 West Indies, 176, 257, 277.
 West Virginia, 176, 251.
 Wisconsin, 177, 257, 277, 278.
 Wyoming, 177, 222, 247, 251, 257, 277, 285, 288.
- Ditches, 182.
 costs of, 61.
 Diving, 364.
 Doors, 420.
 Drainage, mine, 179.
 Drainage, mine: bailing water, 182.
 compressed air pumping, 181
 Cornish pumps, 181
 costs of, 54
 ditches, 182
 electrically-driven pump, 181.
 hand pumps, 181
 hydraulic pumps, 181
 in general, 179.
 miscellaneous, 179.
 pipes and pipe fittings, 182.
 pump tests, 180.
 pumps for mine use, 180.
 rotary pumps, 180.
 sinking pumps, 181.
 siphons in mines, 181.
 sumps, 182.
 theory of pumping, 180.
 tunnels, 182.
 unwatering shafts, 182.
 vacuum pumps, 181
 valves and valve gear, 182.
 water portage, 181.
 water rings, 180
- Drawing, 202
 Drawing pillars, 372.
 Dredging, 385.
 costs of, 54
 Drift mining, 376
 Drilling and boring, 183, 185
 air hammer drills, 184.
 churn drills and drilling, 186.
 costs of, 55.
 deep drilling, 187.
 diamond drills, 187.
 electric drills, 184.
 forming drills, 184.
 hand drills, 183.
 machine drills, 183.
 power drills, 183.
 prospect drilling, 185.
 rate of drilling, 187.
 reamers for boring apparatus, 188.
 records, 185.
 rotary drills, 187.
 submarine drilling, 188.
 surveying bore holes, 188.
 tempering drills, 184.
 use of bore holes, 185.
 Drums for hoisting, 298, 301.
 Dry concentration, 41.
 Dumping devices, 194.

- Dumping devices: bucket dumps, 194
 cages, 194.
 cradles, 194.
 dumps, 194.
 methods, 301.
 rotary dumps, 194.
 self-dumping cages, 194
 skip dumps, 194.
 tipples, 194.
- Dust as an explosive, 8.
- Earth and snow slides, 17.
- Earthquakes, 233.
- East Indies, see Districts.
- Ecuador, see Districts.
- Education, 195.
 bibliographies, 195.
 blue-printing, 202
 correspondence schools, 200
 definitions and terms, 202.
 drawing, 202
 engineering, 199.
 experimentation, 202.
 expositions, 201.
 indexes, 195
 industrial, 205.
 laboratories, 203.
 measures, 202.
 mining, 198.
 mining institutes, 200
 mints, 203
 models, 203.
 periodicals, 201.
 practice, 201.
 requirements, 204.
 research, 202.
 scope of, 196.
 societies, 201.
 summer schools, 202
 symbols, 203.
 technical, 196.
 terms, 202.
 textbooks, 195.
 theory, 201.
 trade schools, 200.
 weights, 202.
- Efficiency of fans, 420.
- Egypt, see Districts.
- Electric coal cutters, 389.
 drills, 184.
 hoisting, 299.
- Electric power plant, 399.
- Electrical haulage, 297
 pumping, 181.
- Electrically-driven pumps, 181.
- Electricity for lighting mines, 359.
 for signaling, 411.
 in the mine, 389.
- Electro-metallurgy, 324.
 of iron, 339.
 of steel, 339.
- Electrostatic separation, 36.
- Elevators, 295
- Emeralds, see Geology.
- Engineer, 309.
- England, see Districts.
- Entries in mines, see Development.
- Equipment of electric plants, 399.
 of mines, 363.
- Estimation of value of mines, 647.
- Ethics, 309
- Examination of rope, 406.
 cost of, 74.
 of mines, .
- Examples of tunneling, 417.
- Excavation of earth, 381.
 costs of, 59.
- Explosions, mine, 14, 17.
 in air compressors, 28.
- Explosives for mining purposes, 206.
 burning, 353.
 costs of, 60.
 detonators, 207.
 development of, 206.
 firing of, 19.
 fuses, 207
 handling of, 208.
 in coal mining, 207.
 kinds of, 206.
 manufacture of, 206.
 primers, 207
 properties of, 206.
 quantity of, 20, 208.
 regulations for cities, 206.
 safety, 206.
 storing of, 208.
 testing of, 208.
 thawing, 209.
 theory of, 206.
 use in gas and oil wells, 207.
- Expositions, 201
- Extra-lateral rights, 357.

- Fall of roof and walls, 7.
- Fans, construction and use, 419.
 - tests on, 420.
- Faults, 233
- Federal mining laws, 356.
- Feeders, automatic, 402.
- Fiber ropes, 406.
- Filing card systems, 311.
- Fine crushing, 404.
- Fineness of gold, 346.
- Fires, mine, 12.
- Firing explosives, 19.
- First aid, 7.
- Florida, see Districts.
- Flotation processes, 33
- Flow sheets, 34.
- Flue dust, 342.
- Flushing, 379.
- Flume, 342
- Flumes, 352.
 - costs of, 61.
- Fluming, 414
- Fluorspar, see Geology
- Formations, 216.
- Forming drills, 184.
- Fossils, 226.
- Foundations, 351.
- France, see Districts.
- Frauds, 312.
- Friction brakes, 389.
 - clutches, 389
- Fuels and fuel testing, 209.
 - briquetting, 213.
 - buying coal, 211.
 - characteristics of coal, 209.
 - coke, 210.
 - composition of coal, 209.
 - costs of, 61.
 - decomposition, 209
 - gas as power generator, 212.
 - geology of, 224.
 - manufacture of coke, 210.
 - oil as power generator, 211.
 - peat, 210.
 - properties of coke, 210.
 - substitutes of fuel, 212.
 - testing of, 213.
 - use of gas, 212.
 - value of fuels, 213.
 - waste of coal, 398.
- Fuller's earth, see Geology.
- Function of gold and silver, 190.
- Furnaces, 342.
- Fuses, 207.
- Gas as power generator, 212.
 - engines, 300, 397.
 - in mines other than coal, 354.
- Gases, 352.
- Gasoline motors, 297.
- Gauge of cars, 415.
- Gems, 349.
- General mining, 360
- Geological formations, 216.
- Geological maps, 313.
- Geology, 215.
 - air blasts, 233
 - alum and aluminum, 142, 239.
 - antimony, 129, 240.
 - apatite, see Districts.
 - arsenic, 163, 240.
 - asbestos, 117.
 - asphalts, 240.
 - auriferous gravels, 272.
 - barites, 147, 175, 176, 241.
 - bismuth, 117
 - borax, 135, 172, 244.
 - building stone, 118, 128, 168, 172, 241.
 - cement rocks, 158, 170, 175, 177, 242
 - clays, 117, 122, 129, 147, 149, 151, 164, 166, 170, 242.
 - coal, 117, 120, 125, 130, 131, 135, 138, 141, 142, 143, 147, 148, 149, 150, 157, 161, 163, 165, 166, 168, 170, 171, 172, 174, 175, 176, 177, 209, 211, 243.
 - copper, 117, 120, 125, 128, 131, 142, 147, 148, 150, 158, 161, 169, 172, 174, 176, 177, 178, 253.
 - diamonds, 117, 120, 130, 133, 135, 172, 257.
 - diatomaceous earth, 258.
 - districts, 217.
 - earthquakes, 233.
 - emeralds, 282.
 - faults, 233.
 - feldspar, 258.
 - fluorspar, 118, 258.
 - fossils, 226.
 - fuels, 223
 - fuller's earth, 118, 258.
 - gas, 118, 119, 177, 212, 281.

- Geology: glaciers, 223.
 glass sands, 118, 172, 177, 259.
 gold and silver, 120, 126, 128, 131, 133, 135, 138, 141, 143, 144, 146, 147, 152, 158, 159, 162, 164, 166, 168, 170, 176, 178, 259.
 graphite, 151, 172, 178, 272.
 gypsum, 136, 158, 164, 178, 272.
 iron, 118, 122, 127, 136, 139, 156, 163, 164, 167, 170, 171, 174, 176, 177, 179, 273.
 lead, 119, 145, 149, 151, 156, 171, 173, 175, 177, 277.
 lignites, 146, 243
 manganese, 119, 133, 149, 169, 173, 175, 279.
 mica, 179, 281.
 monazite, 141, 281.
 nickel, 166, 282.
 nitrates, 239.
 natural bridges, 233.
 ocher, 282
 onyx, 282.
 origin of coal, 234.
 of petroleum, 234.
 peat, 127, 151, 173, 210, 282.
 petroleum, 119, 128, 132, 137, 165, 169, 175, 177, 179, 211, 283.
 phosphates, 119, 132, 133, 171, 173, 175, 285
 platinum, 169, 179, 286.
 progress and studies, 227.
 quicksilver, 119, 130, 137, 170, 171, 287.
 rare earths, 117, 171.
 rare metals, 117, 118, 280.
 ruby, 282; see Geology.
 rutile, 287
 salt, 133, 175, 179, 285
 sapphire, 282.
 silver, 140, 148, 154, 160, 162, 171, 173, 288
 slate, 147, 163, 173, 175.
 solutions of faults, 233.
 sulphur, 119, 156, 173, 179, 288.
 theory of ore deposits, 234.
 tin, 119, 122, 128, 132, 133, 142, 166, 170, 172, 291
 tungsten, 120, 129, 138, 141, 145, 161, 292.
 turquoise, 282.
 types of veins, 232.

 Geology: vanadium, 118, 168.
 volcanoes, 233.
 wolframite, 293
 zinc, 119, 133, 156, 161, 165, 277.
 Georgia, see Districts
 Germany, see Districts.
 Getters, 390
 Glaciers, 223.
 Glass sands, 118, 172, 177.
 making, 324.
 Gob fires, see Mine fires.
 Gold, 348; see Geology.
 amalgamation, 34.
 analysis of, 24.
 and silver, 24
 fineness of, 346.
 properties of, 348.
 Governors for water wheels, 398.
 Graphite, 349.
 Gravels, auriferous, 277
 frozen, 379.
 practice in sampling, 409.
 Greece, see Districts.
 Guianas, see Districts
 Guides for shafts, 302.
 Gypsum, 136, 158, 164, 178, 272.

 Hand drills, 183
 pumps, 257.
 tests, 39.
 Handling and storing coal and mineral, 293.
 chutes, 294.
 costs of, 63
 elevators, 295.
 explosives, 208.
 loading cars and boats, 294.
 methods of, 472.
 mucking, 293
 storage of, 295.
 tramming, cost of, 107.
 unloading cars and boats, 294.
 weighing, 295.
 Haulage in mines, 295.
 animal, 296
 capacity of mine cars, 297.
 clips, 298
 compressed air, 297.
 costs of, 63.
 couplings, 298
 design of mine cars, 297.
 electrical, 297.

- Haulage in mines:** gasolene motors, 297.
 inclines, 296.
 mine car running gear, 297.
 mine car wheels, 297.
 mine cars, 297
 mine roads, 298
 on inclines, 296.
 sheaves, 298.
 steam locomotives, 293
 switches, 298.
 systems, 295.
 track, 298
 tractive force, 295.
 turnouts, 298.
 turntables, 298.
 wheelbarrows, 298.
- Head frames,** 350.
- Health of miners,** 304
- History of mining,** 361
- Hoisting accidents,** 17
- Hoisting in mining,** 299.
 accidents, 17.
 appliances for, 299
 brakes for, 301.
 buckets, 300.
 cage keeps, 302.
 cages for, 301, 302.
 calculations, 299
 chains, 302
 chairs, 302
 costs of, 66
 counterbalancing, 300
 couplings, 302
 cross-heads, 302
 deep winding, 300.
 drums, 301.
 electric, 299.
 gas engines, 300.
 guides, 302.
 indicators for, 301.
 inspection of mines, 361
 methods of, 301.
 oil, 300.
 overwinding, 300
 pneumatic, 300
 prevention of overwinding, 300.
 ropes, 302.
 safety catches for mine cages, 302.
 shaft-bottom layouts, 301
 shaft-closing arrangements, 303.
 sheaves, 301.
 skips for, 301
- Hoisting in mining:** speed of, 299.
 water power, 300.
 windlasses, 301.
 whims, 301.
- Honduras,** see Districts
- Horse power of boilers,** 397.
 of engines, 397.
- Hydraulic air compressors,** 29.
 costs of, 67.
 elevators, 382.
 giants, 382.
 mining, 382.
 pumps, 181.
- Idaho,** 219; see Districts.
- Illinois,** see Districts
- Illumination by safety lamps,** 358.
 of buildings, 359
 of mines, 359
- Inclines,** 296.
- Increase of temperature with depth,**
 387.
- Indexes,** 195
- India,** see Districts
- Indiana,** see Districts.
- Indicators for hoisting,** 301
- Industrial features of mining,** 188.
- Industries and education,** 205
- Injuries, compensation for,** 6, 17.
- Inspection of mines,** 362
- Institutes, mining,** 200.
- Instruments, surveying,** 412.
- Inundation of mines,** 8.
- Investments,** 311.
- Iowa,** see Districts.
- Ireland,** 182, see Districts.
- Iron,** 118, 122, 127, 136, 139, 156, 163,
 164, 167, 170, 171, 174, 176, 177,
 179, 273, 345
 blast furnace method, 338.
 determination of, 27.
 for mine support, 391.
 metallurgy of, 335
 ores, 349.
 trade, 192
- Italy,** see Districts.
- Japan,** see Districts.
- Jigs and jugging,** 32.
- Kansas,** 220; see Districts.
- Keeping mining notes,** 311.

- Kentucky, see Districts.
- Kinds of conveyors, 49.
 - of explosives, 206.
 - of rope for mine use, 406.
 - of screens, 410
 - of support in mines, 390.
- Korea, see Districts.
- Labor in mines, 303.
 - apprenticeship, 306.
 - changing houses, 307.
 - clubs, 307.
 - contract systems, 307.
 - costs of, 67
 - discipline in mines, 306.
 - health, 304.
 - insurance, 306
 - labor problems, 304.
 - labor troubles, 306.
 - labor unions, 307.
 - leasing, 307
 - ore thefts, 307
 - problems, 303.
 - strikes, 306.
 - troubles, 306.
 - unions, 307
 - wages, 307.
 - workmen, 304.
 - workmen's aid, 306.
 - workmen's compensation, 306.
- Laboratories, 203.
- Ladders in mines, 308.
- Lake transportation, 416.
- Land acts, 356.
- Lapland, see Districts.
- Large blasts, 20.
- Law, apex, 357.
 - applications, 355.
 - assessments, 357.
 - claims, 357.
 - countries, 355.
 - decisions, 358.
 - extra-lateral rights, 357.
 - federal mining laws, 355.
 - land acts, 356.
 - leases, 358.
 - locations, 357.
 - mill sites, 358.
 - mineral land acts, 357.
 - mining, 356
 - mining royalties, 358
 - of states and countries 355.
- Law: principles, 355.
 - riparian and water rights, 358.
 - royalties, 358.
 - taxes, 357
 - the law of the apex, 358.
 - tunnel rights, 358.
- Lead, 349; see Geology.
 - determination of, 25.
 - metallurgy of, 340.
 - ores, 589.
- Leasing, 307, 358.
- Life in mines, 308.
- Lighting mines, 358.
 - acetylene gas, 359.
 - candles, 359
 - costs of, 70.
 - electricity for, 359.
 - illumination by safety lamps, 358.
 - of buildings, 358.
 - of mines, 358.
 - safety lamps, 359.
 - shaft lighting, 359.
 - testing by safety lamps, 359.
- Lightning entering mines, 17.
- Lignites, 243.
- Lime, blasting, 20.
- Litigation, 387.
- Loading and unloading vessels and cars, 294.
 - conveyors for, 49.
- Locations, 357.
- Longwall mining, 372.
- Loss of life in mining, 1.
- Lubrication, 388.
- Machine drills, 183.
- Machinery, models of, 203.
 - mining, 388, 389.
- Machines for tunneling, 418.
- Madagascar, see Districts.
- Magnetic separation, 36.
 - surveys, 413.
- Maine, 220; see Districts.
- Malaysia, see Districts.
- Mammoth blasts, 20.
- Management of mines, 308.
 - accounts, 310.
 - administration, 308.
 - amortization, 311.
 - bookkeeping, 310.
 - buying ore, 310.
 - costs keeping, 49.

- Management of mines:** costs of, 70.
 depreciation, 311
 engineer, 309
 ethics, 309
 filing and card system, 311.
 frauds, 312
 investments, 311.
 keeping mining notes, 311.
 managers, 310.
 organization, 309.
 rating of mining property, 312.
 risks, 312.
 selling ore, 310.
 stock, 311.
 stockholders, 311.
 superintendents, 310.
 taxation of mining property, 312.
- Managers of mines,** 310
- Manganese, see** Geology.
 methods of determining, 38.
- Manufacture of explosives,** 206.
 of coke, 210.
 of mine and mill machinery, 388.
 of rope, 406
- Maps,** 312.
 countries, 312.
 districts, 312.
 geological, 313.
 making, 313
 mine, 313
- Maryland,** 220; *see* Districts
- Masonry,** 391.
- Massachusetts,** 220; *see* Districts.
- Materials of construction,** 350.
- Measurement of ore,** 348, 409.
 of air currents, 420
 of water, 422
- Measures,** 202.
- Mercury, determination of,** 22.
- Metals,** 345.
 alloys of iron, 345.
 aluminum, 345.
 copper, 346.
 costs of, 92.
 fineness of gold, 346.
 gold, properties of, 346.
 iron, 345.
 mass copper, 346.
 platinum, 346.
 properties of, 346.
 quicksilver, 346.
 silver, 346.
- Metals:** tin, properties of, 346
- Metallurgical methods,** 314
 assaying, 315
 bessemerizing of copper matte, 323.
 blast furnace smelting of chimneys, 342
 bog house, 342
 calculations, 315.
 chlorination, 334.
 cobalt, 341
 copper, 318, 321.
 costs of, 70, 81.
 cyaniding, 325.
 plants, 334.
 dust, 342.
 electro-metallurgy 324, 339.
 of iron, 339
 furnaces, 342
 glass making, 324
 gold, 324.
 iron; 335.
 blast furnace method, 338.
 lead, 340.
 miscellaneous information, 344.
 nickel, 341.
 processes, 314.
 pyritic smelting, 322
 of copper, 322.
 quicksilver, 341.
 refining copper, 323.
 gold and silver, 335.
 reverberatory smelting of copper, 322.
 roasting ores, 342
 silver, 324.
 smelting gold, 325.
 smoke problem, 342.
 tin, 343.
 works, 315.
 zinc, 344.
- Meteorites,** 349.
- Methods of assaying,** 315.
 of blasting, 18.
 of dumping, 301.
 of handling mineral, 293
 of hoisting, 299.
 of mining, 363, 369, 373, 383.
 of mine construction, 350.
 of quarrying, 382.
 of reduction, 401.
 of sampling mines, 407.

- Methods of signaling, 411.
 - of sizing, 410.
 - of stoping, 376
 - of surveying, 412.
 - of timbering, 392.
 - of transportation, 414.
 - of tunneling, 417.
 - of ventilation, 419
- Mexico, see Districts.
- Mica, 349.
- Michigan, see Districts.
- Milling methods, 381.
 - costs of, 88.
 - water in, 423.
- Mills, 745.
 - sites, 358.
- Mine cars, 297.
 - costs, 49.
 - equipment, 352.
 - explosions, 206.
 - fires, 12.
 - labor, 303
 - ladders, 308.
 - maps, 313.
 - regulations, 13.
 - reports, 360.
 - roads, 298.
 - sampling, 407.
 - stables, 18.
 - support, 390.
 - tracks, 298.
 - wheels, car, 297.
- Mine and mill construction, 349.
 - buildings, 350.
 - costs of, 74.
 - design of structures, 349.
 - equipment, 352
 - flumes, 352.
 - foundations, 351.
 - head frames, 350.
 - materials of, 350.
 - methods of, 350.
 - ore bins, 351.
 - shops, 350.
 - tanks, 352.
 - tipples, 350
- Mine and mill machinery, 388.
 - at the face, 389.
 - bearings, 388.
 - belts, 388.
 - electric coal, 389.
 - friction brakes, 389.
 - Mine and mill machinery: friction
 - clutches, 389.
 - getters, 390.
 - lubrication, 388.
 - manufacture of, 388.
 - mechanical, 390.
 - protection of structures, 389.
 - pulleys, 388.
 - use of, 388.
- Mine gases, 352.
 - atmosphere of mines, 352.
 - barometric pressure, 354.
 - blowers, 354.
 - burning of explosives, 353.
 - detection of, 354.
 - determination of, 354.
 - estimation of quantity, 355.
 - gas in mines other than coal, 354.
 - gases, 354.
 - occurrence in coal, 354.
 - outbursts of, 354.
 - testing for, 354, 359.
 - tests for, 354.
- Mineral land acts, 356
- Minerals, 346.
 - amber, 349.
 - analysis, 23
 - asbestos, 349.
 - asphaltum compounds, see Geology.
 - carborundum, 349.
 - classification, 346.
 - copper, 348.
 - corundum, 349.
 - determination of, 346.
 - diamonds, origin, 349.
 - gems, 349.
 - gold, 348.
 - graphite, 349.
 - iron ores, 349.
 - lead ores, 349.
 - measurement of ore, 348.
 - meteorites, 349.
 - mica, 349.
 - miscellaneous occurrence, 347.
 - nickel ores, 349.
 - phosphates, 349.
 - precious stones, 349.
 - quicksilver, 349.
 - radium, 349.
 - salt, 349.
 - sampling of, 409.
 - silver, 348.

- Minerals: sulphur, 349.
value of ore, 347.
washing, 38
weight of ore, 348.
zinc ores, 349.
- Mining, 360.
abandoned mines, 387, 388.
accidents in, 1.
beach, 380.
breaking down coal at face, 373.
Bureau of Mines, 360
camping outfits, 363.
caving system, 375
costs of, 76, 81, 82, 85.
culm, use of, 379.
damages, 387.
débris, 387.
deep, 380
development, 365.
difficulties, 387.
dimensions of rooms, 373.
of shafts and slopes, 365.
divining, 364.
drawing pillars, 372.
dredging, 385.
drift, 376
education, 198
elevators, 382.
entries in, see Development.
estimation of mines, 364.
examination,
excavation in, 381.
excavators in, 381
filling in mines, 379.
frozen gravel, 379.
general, 360.
gravels, frozen, 379.
history of, 361.
hydraulic, 382.
hydraulic elevators, 382.
hydraulic giants, 382.
increase of temperature with depth,
387.
inspection, 361.
law, 355.
lighting, 358.
litigation, 387.
longwall, 372.
loss of life, 1.
methods of, 369.
coal, 369.
milling methods, 381.
- Mining: mine reports, 360.
miscellaneous, 373.
models, 203
open-cut, 381.
ore reserves, 364.
in sight, 364.
packing in, 379.
panel, 372.
permanence, 365.
pillars in, 392.
pocket, 376.
practice in, 385.
prospecting, 363.
protection in, 3.
quarrying, 382.
rate of sinking, 367.
reports, 360.
reworking mines, 387.
river, 380
room, 371, 373.
room-and-pillar, 373.
royalties, 358.
salting in, 388
sampling in, 364
shaft sinking, 367.
steam shovel work, 381.
stopping in, 376
stowing in mines, 379.
temperature in, 387.
thick deposits, 375.
under-sea, 379.
value of, 364.
waste, use of, 379.
waste in, 387.
- Minnesota, see Districts.
Mints, 203.
Mississippi, 220; see Districts.
Missouri, 220.
Models, mine, 203.
Molybdenum, determination of, 22.
Monazite, see Geology.
Montana, see Districts.
Mortality in mines, 1
Mortars, 46.
Mucking, 293
- Nebraska, see Districts
Nevada, see Districts.
New Caledonia, see Districts.
Newfoundland, see Districts.
New Jersey, see Districts.
New Mexico, see Districts.

- New York, see Districts.
 New Zealand, see Districts.
 Nicaragua, see Districts
 Nickel, 349
 determination of, 26
 metallurgy of, 341.
 Nitrates, 451.
 Norway, see Districts
 Nova Scotia, see Districts

 Occurrence of cement materials, see
 Geology and Districts.
 of diamonds, see Geology.
 of gas in coal, 354.
 Ocean transportation, 416.
 Ocher, see Geology.
 Ohio, see Districts.
 Oil, 211.
 as a generator of power, 211.
 engines, 300.
 Oklahoma, see Districts.
 Onyx, see Geology.
 Open-cut mining, 381
 Operation of compressors, 28.
 of conveyors, 49.
 Ore bins, 351.
 bodies, measurement of, 758.
 deposits, 234.
 in sight, 364.
 reserves, 364.
 sampling of, 408.
 thefts, 307.
 value of, 347.
 Oregon, see Districts.
 Organization, 309.
 Origin of coal, 234.
 of diamonds, 349.
 of petroleum, 234
 Outbursts of gas, 354.
 Overcasts, 420.
 Overwinding in hoisting, 300.

 Packing mine workings, 379.
 costs of, 93.
 Paint manufacture, 24, 168.
 Pan amalgamation, 36.
 Panama, see Districts.
 Panel mining, 372.
 Paper ropes, 406.
 Patio amalgamation, 36.
 Peat, see Geology.
 Pennsylvania, see Districts.

 Periodicals, mining, etc., 201.
 Permanency, 365
 Persia, see Districts
 Peru, see Districts.
 Petroleum, 211.
 Philippine Islands, see Districts.
 Phosphates, 349; see Geology.
 Photography, 396.
 Pillars, barrier, 392
 in mining, 392
 size of, 392.
 Pipes and pipe fittings, 182, 398.
 costs of, 93
 Plates and amalgamation, 35.
 Plants, fossil, 226
 power, 396
 Platinum, see Geology.
 Plumbing shafts, 414
 Pneumatic hoisting, 300
 Pocket mining, 376
 Poisoning and injuries, 17
 Pollution of water, 423
 Portage, 414.
 costs of, 93.
 water, 181.
 Portugal, see Districts
 Powder explosions, 17.
 Power drills, 183
 Power, steam, water, electricity, etc.,
 396.
 applications of, 396.
 boiler, calculations, 396
 compounds, 398.
 feed-water, 397.
 horse-power, 397.
 tests, 397
 boilers, steam, 397.
 central power plant, 398.
 condensers, 398.
 costs of, 93.
 consumption of coal, 398.
 of steam, 398.
 electric power plant, 399.
 electricity in the mine, 399.
 equipment of electric power plant,
 399.
 gas engines, 212.
 governors, 398.
 horse-power of steam engines, 397.
 mechanical feeders for, 398.
 oil engines, 211.
 plants, power, 396.

- Power: scale compounds, 398.
- steam engine calculations, 397.
- pipes and coverings, 398.
- superheated steam, 397
- wet steam, 397
- tests for steam engine, 397.
- transmission, 401.
- valve and valve gear, 398.
- waste of coal, 398.
- of steam, 398.
- water-power plants, 398.
- water wheels, 398.
- Practice in milling, 42.
- of reduction, 735.
- sampling, 409.
- Precious stones, 349.
- Preparation of coal, 30.
- Preservation of materials, 395.
- Prevention of accidents, 3.
- of overwinding, 300.
- Principles of law, 355.
- Processes, 314, 325, 334.
- metallurgical, 341.
- Production of mineral products, 188.
- costs of, 97.
- of precious metals, 189.
- Progress and studies in geology, 227.
- Properties of metals, 346
- of coke, 210.
- of explosions, 206.
- Prospect drilling, 185.
- Prospecting, 363.
- costs of, 98
- Protection in mining, 3
- Protection of iron, 389.
- of ropes, 406.
- Pulleys, 388
- Pumping, 180, 181.
- costs of, 98.
- electrical, 181.
- Pumps for mine use, 180
- tests of, 180.
- Purification of water, 423.
- Pyritic smelting, 322.
- of copper, 322.
- Quantity of explosive used, 208.
- quarrying, 382
- Quicksilver, 349; see Geology and Dis-
- tricts.
- metallurgy of, 341
- Radium, 349.
- Rails, 415
- sections, 415.
- Raises, 367.
- Rare metals, 117, 118, 280
- metallurgy of, 341.
- Rate of tunneling, 418
- of drilling, 187
- of sinking, 367
- Rating of mining property, 312.
- Reamers for boring apparatus, 188.
- Reduction of ores, 401.
- ball mills, 404.
- costs of, 99
- crushers, 402.
- construction of, 402
- operation of, 402
- feeders, automatic, 402.
- fine crushing, 404
- methods of, 401.
- mills, 404.
- miscellaneous types, 404.
- practice of, 401.
- rolls, 402.
- construction of, 402
- operation of, 402
- stamp-mill practice, 402.
- tube mills, 404.
- Refining copper, 323
- gold and silver, 335.
- Regulations, 13
- explosive, 206.
- Regulators, 420.
- Reports, mining, 360, 364.
- Requirements of education, 204.
- Research work, 202.
- Rescue work in mines, 7.
- Reverberatory melting of copper, 322
- Reworking abandoned mines, 387.
- Rights, 358.
- Riparian and water rights, 358.
- Risks, mining, 312.
- River mining, 380
- transportation, 416.
- Roasting ores, 342.
- Robbing pillars, 372.
- Rolls, 402.
- construction of, 402.
- operation of, 402.
- Room-and-pillar, 371.
- Ropes, 302, 406.

- Ropes: breakage of, 407.
 care of, 406.
 connection of, 406.
 costs of, 100.
 examination of, 406.
 fiber, 406
 for mining purposes, 406.
 kinds of, 406.
 manufacture of, 406.
 paper, 406.
 protection of, 406.
 splicing, 406.
 strength of, 406.
 tests of, 406.
 working stresses, 406.
- Rotary drills, 187.
 dumps, 194.
 pumps, 180
- Royalties, 358.
 costs of, 100.
- Ruby, see Geology.
- Rules for faults, 233.
- Running gear, 297.
- Russia, see Districts.
- Safety catches for cages, 302.
 explosives, 206.
 lamps, 359.
- Salt, 349; see Geology and Districts.
 making, 42.
- Salting mines, 388.
- Sampling mines, 407.
 apparatus employed, 407.
 coal, sampling of, 408.
 costs of, 101
 gravel, sampling of, 409.
 methods of, 407
 mineral, sampling of, 408.
 ore bodies, measurement of, 409.
 ores, sampling of, 408.
 practice in sampling, 409.
- Sand treatment, 41.
- Sapphires, see Geology
- Scale compounds for boilers, 398.
- Scandinavia, see Districts
- Schools, engineering, 199.
- Screens, 410.
 kinds of, 410.
 operation of, 410
- Self-dumping cages, 194.
- Selling ore, 310.
- Shaft-bottom layouts, 301.
- Shafts, closing arrangements, 303.
 lighting, 359.
 lining of, 393.
 plumbing, 414
 sinking, 367.
 costs of, 101.
 unwatering, 182.
 water rings, 180.
- Shape of air ways, 420.
- Sheaves, 301.
- Shops, 350.
- Signaling in mines, 411.
 codes for, 411.
 compressed air, 411.
 costs of, 103.
 electricity, 411.
 methods of, 411.
 telephones, 411.
- Silver, 324, 346, 348; see Geology and Districts.
 amalgamation of, 34.
 analysis of, 24.
- Siphons, 181.
- Siphons in mines, 181.
- Sites, mill, 358.
- Size of air ways, 420.
 pillars, 392
- Sizing of mineral, 410.
 costs of, 103.
 screens, kinds of, 410
 operation of, 410
 theory of sizing, 410.
- Skip, dump, 194, 301.
 for hoisting, 301.
- Slime treatment, 40.
- Smelting of copper, 321.
 of gold, 325.
 of silver, 325.
- Smoke problem, 342.
- Snow slides, 17.
- Societies, 201.
- Solutions of faults, 233.
- Sorting, costs of, 103.
- Sources of water, 421.
- South Dakota, see Districts.
- Spain, see Districts.
- Speed of hoisting, 299.
- Splicing of rope, 406
- Splitting, air, 419.
- Spontaneous combustion, 14.
- Square-sets, 394.

- Stability of dams, 116.
Stables, mine, 18.
Stamp-mill practice, 402.
States, laws, 355.
Steam engine calculations, 397.
 locomotives, 296.
 pipes and coverings, 398
 shovels in mining, 381.
Stockholders, 311.
Stocks, 311
Stoping, 376
 costs of, 103.
 methods, 376.
Stoppings, 420.
Storage of mineral, 298.
Storing explosives, 208.
Strength of rope, 406.
 of timber, 391.
Stresses in dams, 116.
Strikes, 306.
Stripping, costs of, 104.
Submarine blasting, 20, 188.
 drilling, 188.
Subsidence in mines, 391.
Substitutes for fuels, 212.
Sulphur, see Geology and Districts.
 determination of, 24.
Summer school work, 202.
Sumps, 182.
Superheated steam, 397.
Superintendents, 310.
Supplies, costs of, 104.
Support in mines, 390.
 cementation, 393.
 coal and iron for, 391.
 conditions affecting, 390.
 costs of, 98, 104.
 iron for, 391.
 kinds of, 390.
 masonry, 391.
 pillars, barrier, 392.
 size of, 392.
 shaft lining, 393.
 subsidence, 391
 timber, kinds of, 390.
 preservation of, 395.
 strength of, 391
 timbering, 392.
 methods of, 392.
 square sets, 394.
 tubbing, 393.
 tunnel support, 393.
Surface surveys, 413.
Surveying, 412.
 bore holes, 188.
 claims, 413.
 costs of, 107.
 instruments, 412
 magnetic surveys, 413.
 methods, 412.
 shaft plumbing, 414.
 surface, 413.
 underground, 413.
Surveys, geological, 215.
Sweden, see Districts.
Switches, 298.
Symbols, 303.
Systems of haulage, 295.

Tables, concentrating, 37.
Tamping and materials, 20.
Tanks, 352.
Taxation of mining properties, 312.
Taxes, 357; see Districts.
Technical education, 195.
 costs of, 100.
Telephones in mines, 411.
Tellurium, determination of, 22.
Tempering drills, 184.
Tennessee, see Districts.
Testing explosives, 208.
 fuels, 31, 213.
 gases, 354, 359.
 safety lamps, 359.
Tests for mine gases, 354
 for fans, 420.
 for minerals, 39.
 for pumps, 180.
 for steam engines, 397
 of rope, 406.
Texas, see Districts.
Textbooks, 195.
Thawing explosives, 209.
Theory of concentration, 31.
 of compression, 29.
 of cyaniding, 325.
 of education, 301.
 of explosives, 206.
 of metallurgy, 314.
 of ore deposits, 234
 of pumping, 180.
 of sizing, 410.
Timber, kinds of, 390.
 costs of, 98.

- Timber: preservation, 395.
- strength, 391.
- Timbering, 393.
- methods, 392.
- square sets, 394.
- Tin, see Geology and Districts.
- determination of, 26.
- metallurgy, 343.
- Tipples, 194, 350
- Tracks, 298.
- Tractive force, 295.
- Trade schools, 200
- Tramming, 293.
- costs of, 107
- Transmission of power by compressed
 - air, 401.
 - by electrical power, 401.
 - by ropes, 401.
 - by steam, 401.
- Transportation, 414.
- cableways, 416.
- costs of, 107.
- canals, 416
- cars, capacity of, 415.
- costs of, 108
- fluming, 414
- gauge, 415.
- lake, 416.
- methods of, 414.
- ocean, 416.
- packing, 414.
- portage, 414.
- rail, 415
- rails, 415.
- rail-section, 415.
- roads, wagon, 416.
- wagon, 416.
- Tubbing, 393.
- Tube-mills, 404.
- Tungsten, see Geology.
- determination of, 26.
- Tunneling, 417, 418
- costs of, 112
- examples of, 417
- machines, 418
- methods of, 417
- Tunnels, 417.
- drainage, 182.
- rights, 358.
- support, 393
- Turkey, see Districts.
- Turnouts, 298.
- Turntables, 298.
- Turquoise, see Geology.
- Types of compressors, 28.
- of veins, 232.
- Underground conveyors, 49.
- dams, 116.
- surveying, 413.
- Under-sea mining, 379.
- Unions, labor, 307.
- United States, see Districts.
- Unloading cars and boats, 294.
- Unwatering shafts, 182.
- Use of bore holes, 185.
- of explosives, 207.
- of gas, 185
- of mine and mill machinery, 388.
- Vacuum pumps, 181.
- Value of fuels, 213.
- of mines, 364.
- of ore, 347.
- Valves and valve-gear, 182, 398.
- Veins, types, 232.
- Venezuela, see Districts
- Ventilation of mines, 419.
- air, quantity of needed, 420.
- air-currents, splitting of, 419.
- measurement of, 420.
- costs of, 115.
- doors, 420.
- fans, construction and use, 419.
- tests on, 420.
- in coal mines, 420.
- in metal mines, 420.
- measurement of air, 420
- mechanical ventilators, 419.
- methods, 419.
- overcosts in mines, 420.
- quantity of air needed, 420.
- regulators, 420.
- shape of air-ways, 420.
- size of air-ways, 420
- splitting air currents, 419.
- stoppings, 420.
- Volcanoes, 233.
- Wages, 307.
- Wagon, 416.
- Washing coal and mineral, 38.
- costs of, 115.
- Washington, see Districts.

- Waste, in mines, 39, 387.
 - of coal, 398.
 - of steam, 398
 - use of, 379
- Water, 421.
 - costs of, 116.
 - failing, 181.
 - in milling, 423.
 - measurement of, 422.
 - pollution of, 423.
 - portage, 181.
 - purification, 423.
 - rights, 358.
 - sources of, 421.
 - supplies, 421.
- Water-power, 398.
 - hoisting, 300
 - plants, 398.
 - wheels, 398
- Weights, 202.
 - of ore, 348.
- West Indies, see Districts.
- West Virginia, see Districts.
- Wet steam, 397.
- Wetting down dust, 10.
- Wheelbarrows, 298.
- Wheels, car, 297.
- Whims, 301
- Windlasses, 301.
- Winzes, 367.
- Wisconsin, see Districts.
- Wolframite, see Geology and Districts.
 - determination of, 22
- Working stresses, 406.
- Workmen, 304.
- Workmen's aid, 306
 - compensation, 306
 - insurance, 306
- Works, metallurgical, 315.
- Zinc, see Geology and Districts.
 - determination of, 25.
 - metallurgy of, 344.
 - ores, 349.

SHORT-TITLE CATALOGUE

OF THE

PUBLICATIONS

OF

JOHN WILEY & SONS

NEW YORK

LONDON · CHAPMAN & HALL, LIMITED

ARRANGED UNDER SUBJECTS

Descriptive circulars sent on application Books marked with an asterisk (*) are sold at ~~net~~ prices only All books are bound in cloth unless otherwise stated

AGRICULTURE—HORTICULTURE—FORESTRY

Armstrong's Principles of Animal Nutrition	8vo, \$4 00
* Bowman's Forest Physiography	8vo, 5 00
Budd and Hansen's American Horticultural Manual	
Part I. Propagation, Culture, and Improvement	12mo, 1 50
Part II. Systematic Pomology	12mo, 1 50
Blott's Engineering for Land Drainage	12mo, 2 00
Practical Farm Drainage (Second Edition, Rewritten)	12mo, 1 50
Fuller's Water Supplies for the Farm (In Press)	
Graves's Forest Mensuration	8vo, 4 00
* Principles of Handling Woodlands	Large 12mo, 1 50
Green's Principles of American Forestry	12mo, 1 50
Grotonfeldt's Principles of Modern Dairy Practice (Woll)	12mo, 2 00
* Hawley and Hawes's Forestry in New England	8vo, 3 50
* Herrick's Denaturation of Industrial Alcohol	8vo, 4 00
* Kemp and Waugh's Landscape Gardening (New Edition, Rewritten)	12mo, 1 50
* McKay and Larken's Principles and Practice of Butter-making	8vo, 1 50
Maynard's Landscape Gardening as Applied to Home Decoration	12mo, 1 50
Record's Identification of the Economic Woods of the United States (In Press)	
Sanderson's Insects Injurious to Staple Crops	12mo, 1 50
* Insect Pests of Farm, Garden, and Orchard	Large 12mo, 3 00
* Schwarz's Longleaf Pine in Virgin Forest	12mo, 1 25
* Solotaroff's Field Book for Street-tree Mapping	12mo, 0 75
In lots of one dozen	8 00
* Shade Trees in Towns and Cities	8vo, 3 00
Stockbridge's Rocks and Soils	8vo, 2 50
Winton's Microscopy of Vegetable Foods	8vo, 7 50
Woll's Handbook for Farmers and Dairymen	16mo, 1 50

ARCHITECTURE.

* Atkinson's Orientation of Buildings or Planning for Sunlight	8vo, 2 00
Baldwin's Steam Heating for Buildings	12mo, 2 50
Berg's Buildings and Structures of American Railroads	8to, 5 00

Birkmire's Architectural Iron and Steel	8vo	\$3 50
Compound Riveted Girders as Applied in Buildings	8vo,	2 00
Planning and Construction of High Office Buildings	8vo,	3 50
Skeleton Construction in Buildings	8vo	3 00
Briggs's Modern American School Buildings	8vo,	4 00
Byrne's Inspection of Materials and Workmanship Employed in Construction	16mo,	3 00
Carpenter's Heating and Ventilating of Buildings	8vo,	4 00
* Corthell's Allowable Pressure on Deep Foundations	12mo,	1 25
* Eckel's Building Stones and Clays	8vo,	3 00
Freitag's Architectural Engineering	8vo,	3 50
Fire Prevention and Fire Protection. (In Press)		
Fireproofing of Steel Buildings	8vo,	2 50
Gerhard's Guide to Sanitary Inspections. (Fourth Edition, Entirely Revised and Enlarged)	12mo,	1 50
* Modern Baths and Bath Houses	8vo,	3 00
Sanitation of Public Buildings	12mo,	1 50
Theatre Fires and Panics	12mo,	1 50
* The Water Supply, Sewerage and Plumbing of Modern City Buildings,	8vo,	4 00
Johnson's Statics by Algebraic and Graphic Methods	8vo	2 00
Kellaway's How to Lay Out Suburban Home Grounds	8vo,	2 00
Kidder's Architects' and Builders' Pocket-book	16mo, mor,	5 00
Merrill's Stones for Building and Decoration	8vo,	5 00
Monckton's Stair-building	4to,	4 00
Patton's Practical Treatise on Foundations	8vo,	5 00
Peabody's Naval Architecture	8vo,	7 50
Rice's Concrete-block Manufacture	8vo,	2 00
Richey's Handbook for Superintendents of Construction	16mo, mor	4 00
Building Foreman's Pocket Book and Ready Reference.	16mo, mor	5 00
* Building Mechanics' Ready Reference Series		
* Carpenters' and Woodworkers' Edition	16mo, mor	1 50
* Cement Workers' and Plasterers' Edition	16mo, mor	1 50
* Plumbers', Steam-Fitters', and Tanners' Edition	16mo, mor	1 50
* Stone- and Brick-masons' Edition	16mo, mor	1 50
Sabin's House Painting	12mo,	1 00
Siebert and Biggin's Modern Stone-cutting and Masonry	8vo,	1 50
Snow's Principal Species of Wood	8vo,	3 50
Wait's Engineering and Architectural Jurisprudence	8vo,	6 00
Law of Contracts	Sheep	6 50
Law of Operations Preliminary to Construction in Engineering and Architecture	8vo,	3 00
Wilson's Air Conditioning	8vo,	5 00
Worcester and Atkinson's Small Hospitals, Establishment and Maintenance, Suggestions for Hospital Architecture, with Plans for a Small Hospital.. . . .	12mo,	1 50

ARMY AND NAVY.

Bernadou's Smokeless Powder, Nitro-cellulose, and the Theory of the Cellulose Molecule	12mo,	2 50
Chase's Art of Pattern Making.	12mo,	2 50
Screw Propellers and Marine Propulsion	8vo,	3 00
* Cloke's Enlisted Specialists' Examiner	8vo,	2 00
* Gunner's Examiner	8vo,	1 50
Craig's Azimuth	4to,	3 50
Crehore and Squier's Polarizing Photo-chronograph	8vo,	3 00
* Davis's Elements of Law.	8vo,	2 50
* Treatise on the Military Law of United States	8vo,	7 00
* Dudley's Military Law and the Procedure of Courts-martial	Large 12mo,	2 50
Durand's Resistance and Propulsion of Ships....	8vo,	5 00
* Dyer's Handbook of Light Artillery	12mo,	3 00

Bissler's Modern High Explosives	8vo	\$4 00
* Fieberger's Text-book on Field Fortification	Large 12mo,	2 00
Hamilton and Bond's The Gunner's Catechism	18mo,	1 00
* Hoff's Elementary Naval Tactics	8vo,	1 50
Ingalls's Handbook of Problems in Direct Fire	8vo,	4 00
* Interior Ballistics	8vo,	3 00
* Lissak's Ordnance and Gunnery	8vo,	6 00
* Ludlow's Logarithmic and Trigonometric Tables	8vo,	1 00
* Lyons's Treatise on Electromagnetic Phenomena Vols I and II	8vo, each,	6 00
* Mahan's Permanent Fortifications (Mercur)	8vo half mor	7 50
Manual for Courts-martial	16mo, mor	1 50
* Mercur's Attack of Fortified Places	12mo,	2 00
* Elements of the Art of War	8vo,	4 00
Nixon's Adjutants' Manual	24mo,	1 00
Peabody's Naval Architecture	8vo,	7 50
* Phelps's Practical Marine Surveying	8vo,	2 50
Putnam's Nautical Charts	8vo,	2 00
Rust's Ex-meridian Altitude, Azimuth and Star-Finding Tables	8vo,	5 00
* Selkirk's Catechism of Manual of Guard Duty	24mo,	0 50
Sharpe's Art of Substituting Armies in War	18mo, mor	1 50
* Taylor's Speed and Power of Ships 2 vols Text	8vo, plates oblong 4to,	7 50
* Tapes and Poole's Manual of Bayonet Exercises and Musketry Fencing.	24mo, leather,	0 50
* Weaver's Military Explosives	8vo,	3 00
* Woodhull's Military Hygiene for Officers of the Line	Large 12mo,	1 50

ASSAYING.

Betts's Lead Refining by Electrolysis	8vo,	4 00
* Butler's Handbook of Blowpipe Analysis	16mo,	0 75
Fletcher's Practical Instructions in Quantitative Assaying with the Blowpipe	16mo, mor	1 50
Furman and Pardoe's Manual of Practical Assaying	8vo,	3 00
Lodge's Notes on Assaying and Metallurgical Laboratory Experiments	8vo,	3 00
Low's Technical Methods of Ore Analysis	8vo,	3 00
Miller's Cyanide Process	12mo,	1 00
Manual of Assaying	12mo,	1 00
Minet's Production of Aluminum and its Industrial Use (Waldo)	12mo,	2 50
Ricketts and Miller's Notes on Assaying	8vo,	3 00
Robine and Lengien's Cyanide Industry (Le Clerc)	8vo,	4 00
* Seamon's Manual for Assayers and Chemists	Large 12mo,	2 50
Ulke's Modern Electrolytic Copper Refining	8vo,	3 00
Wilson's Chlorination Process	12mo,	1 50
Cyanide Processes	12mo,	1 50

ASTRONOMY.

Comstock's Field Astronomy for Engineers	8vo,	2 50
Craig's Azimuth	4to,	3 50
Crandall's Text-book on Geodesy and Least Squares	8vo,	3 00
Doolittle's Treatise on Practical Astronomy	8vo,	4 00
Hayford's Text-book of Geodetic Astronomy	8vo,	3 00
Hosmer's Azimuth	16mo, mor	1 00
* Text-book on Practical Astronomy	8vo,	2 00
Merriman's Elements of Precise Surveying and Geodesy	8vo,	2 50
* Michie and Harlow's Practical Astronomy.	8vo,	3 00
Rust's Ex-meridian Altitude, Azimuth and Star-Finding Tables	8vo,	5 00
* White's Elements of Theoretical and Descriptive Astronomy	12mo,	2 00

CHEMISTRY.

* Abderhalden's Physiological Chemistry in Thirty Lectures (Hall and Defren)	8vo,	5 00
* Abegg's Theory of Electrolytic Dissociation. (von Ende)	12mo,	1 25
Alexeyeff's General Principles of Organic Syntheses. (Matthews)	8vo,	3 00
Allen's Tables for Iron Analysis	8vo,	3 00

Armsby's Principles of Animal Nutrition ...	8vo,	\$4 00
Arnold's Compendium of Chemistry (Mandel)	Large 12mo,	3 50
Association of State and National Food and Dairy Departments, Hartford Meeting, 1906	8vo,	3 00
Jamestown Meeting, 1907	8vo,	3 00
Austen's Notes for Chemical Students	12mo,	1 50
Bernadou's Smokeless Powder—Nitro-cellulose, and Theory of the Cellulose Molecule	12mo,	2 50
* Biltz's Introduction to Inorganic Chemistry (Hall and Phelan)	12mo,	1 25
Laboratory Methods of Inorganic Chemistry (Hall and Blanchard)	8vo,	3 00
* Bingham and White's Laboratory Manual of Inorganic Chemistry	12mo,	1 00
* Blanchard's Synthetic Inorganic Chemistry	12mo,	1 00
* Bottler's German and American Varnish Making (Sabin)	Large 12mo,	3 50
Browne's Handbook of Sugar Analysis (In Press)		
* Browning's Introduction to the Rarer Elements	8vo,	1 50
* Butler's Handbook of Blowpipe Analysis	16mo,	0 75
* Claassen's Beet-sugar Manufacture (Hall and Rolfe)	8vo,	3 00
Classen's Quantitative Chemical Analysis by Electrolysis (Boltwood)	8vo,	3 00
Cohn's Indicators and Test-papers	12mo,	2 00
Tests and Reagents	8vo,	3 00
Cohnheim's Functions of Enzymes and Ferments. (In Press)		
* Danneel's Electrochemistry (Merriam)	12mo,	1 25
Dannert's Methods of Textile Chemistry	12mo,	2 00
Duhem's Thermodynamics and Chemistry (Burgess)	8vo,	4 00
Effront's Enzymes and their Applications (Prescott)	8vo,	3 00
Eissler's Modern High Explosives	8vo,	4 00
* Ekeley's Laboratory Manual of Inorganic Chemistry	12mo,	1 00
* Fischer's Oedema	8vo,	2 00
* Physiology of Alimentation	Large 12mo,	2 00
Fletcher's Practical Instructions in Quantitative Assaying with the Blowpipe	16mo, mor	1 50
Fowler's Sewage Works Analyses	12mo,	2 00
Freseus's Manual of Qualitative Chemical Analysis (Wells)	8vo,	5 00
Manual of Qualitative Chemical Analysis Part I Descriptive (Wells)	8vo,	3 00
Quantitative Chemical Analysis (Cohn) 2 vols	8vo,	12 50
When Sold Separately, Vol I, \$6 Vol II, \$8.		
Fuertes's Water and Public Health	12mo,	1 50
Purman and Pardoe's Manual of Practical Assaying	8vo,	3 00
* Getman's Exercises in Physical Chemistry	12mo,	2 00
Gill's Gas and Fuel Analysis for Engineers	12mo,	1 25
Gooch's Summary of Methods in Chemical Analysis (In Press)		
* Gooch and Browning's Outlines of Qualitative Chemical Analysis	Large 12mo,	1 25
Grotenfelt's Principles of Modern Dairy Practice (Woll)	12mo,	2 00
Groth's Introduction to Chemical Crystallography (Marshall)	12mo,	1 25
* Hammarsten's Text-book of Physiological Chemistry (Mandel)	8vo,	4 00
Hanausek's Microscopy of Technical Products (Winton)	8vo,	5 00
* Haskins and Macleod's Organic Chemistry	12mo,	2 00
* Herrick's Denatured or Industrial Alcohol	8vo,	4 00
Hinds's Inorganic Chemistry	8vo,	3 00
* Laboratory Manual for Students	12mo,	1 00
* Holleman's Laboratory Manual of Organic Chemistry for Beginners (Walker)	12mo,	1 00
Text-book of Inorganic Chemistry (Cooper)	8vo,	2 50
Text-book of Organic Chemistry (Walker and Mott)	8vo,	2 50
* (Ekeley) Laboratory Manual to Accompany Holleman's Text-book of Inorganic Chemistry	12mo,	1 00
Holley's Analysis of Paint and Varnish Products (In Press.)		
* Lead and Zinc Pigments	Large 12mo,	3 00
Hopkins's Oil-chemists' Handbook	8vo	3 00
Jackson's Directions for Laboratory Work in Physiological Chemistry	8vo,	1 25
Johnson's Rapid Methods for the Chemical Analysis of Special Steels, Steel-making Alloys and Graphite	Large 12mo,	3 00
Landauer's Spectrum Analysis (Tingle)	8vo,	3 00
Lassar-Cohn's Application of Some General Reactions to Investigations in Organic Chemistry (Tingle)	12mo,	1 00

Leach's Inspection and Analysis of Food with Special Reference to State Control	8vo,	\$7 50
Löb's Electrochemistry of Organic Compounds (Lorenz)	8vo,	3 00
Lodge's Notes on Assaying and Metallurgical Laboratory Experiments	8vo,	3 00
Low's Technical Method of Ore Analysis	8vo,	3 00
Lowe's Paint for Steel Structures	12mo,	1 00
Lunge's Techno-chemical Analysis (Cohn)	12mo,	1 00
* McKay and Larsen's Principles and Practice of Butter-making	8vo,	1 50
Maire's Modern Pigments and their Vehicles	12mo,	2 00
Mandel's Handbook for Bio-chemical Laboratory	12mo,	1 50
* Martin's Laboratory Guide to Qualitative Analysis with the Blowpipe	12mo,	0 60
Mason's Examination of Water (Chemical and Bacteriological)	12mo,	1 25
Water-supply (Considered Principally from a Sanitary Standpoint)	8vo,	4 00
* Mathewson's First Principles of Chemical Theory	8vo,	1 00
Matthews's Laboratory Manual of Dyeing and Textile Chemistry	8vo,	3 50
Textile Fibres 2d Edition, Rewritten	8vo,	4 00
* Meyer's Determination of Radicles in Carbon Compounds (Tingle)	12mo,	1 25
Third Edition	12mo,	1 00
Miller's Cyanide Process	12mo,	1 00
Manual of Assaying	12mo,	1 00
Minet's Production of Aluminum and its Industrial Use (Waldo)	12mo,	2 50
* Mittelstaedt's Technical Calculations for Sugar Works (Bourbakis)	12mo,	1 50
Mixter's Elementary Text-book of Chemistry	12mo,	1 50
Morgan's Elements of Physical Chemistry	12mo,	3 00
* Physical Chemistry for Electrical Engineers	12mo,	1 50
* Moore's Experiments in Organic Chemistry	12mo,	0 50
* Outlines of Organic Chemistry	12mo,	1 50
Morse's Calculations used in Cane-sugar Factories	16mo, mor	1 50
* Muir's History of Chemical Theories and Laws	8vo,	4 00
Mulliken's General Method for the Identification of Pure Organic Compounds		
Vol I Compounds of Carbon with Hydrogen and Oxygen	Large 8vo,	5 00
Vol II Nitrogenous Compounds. (In Preparation)		
Vol III The Commercial Dyestuffs	Large 8vo,	5 00
* Nelson's Analysis of Drugs and Medicines	12mo,	5 00
Ostwald's Conversations on Chemistry Part One. (Ramsey)	12mo,	1 50
Part Two (Turnbull)	12mo,	2 00
* Introduction to Chemistry (Hall and Williams)	Large 12mo,	1 50
Owen and Standage's Dyeing and Cleaning of Textile Fabrics	12mo,	2 00
* Palmer's Practical Test Book of Chemistry	12mo,	1 00
* Paul's Physical Chemistry in the Service of Medicine (Fischer)	12mo,	1 25
Penfield's Tables of Minerals, Including the Use of Minerals and Statistics of Domestic Production	8vo,	1 00
Pictet's Alkaloids and their Chemical Constitution (Biddle)	8vo,	5 00
Poole's Caloric Power of Fuels	8vo,	3 00
Prescott and Winslow's Elements of Water Bacteriology, with Special Reference to Sanitary Water Analysis	12mo,	1 50
* Reusig's Guide to Piece-Dyeing	8vo,	25 00
Richards and Woodman's Air, Water, and Food from a Sanitary Standpoint	8vo	2 00
Ricketts and Miller's Notes on Assaying	8vo,	3 00
Rideal's Disinfection and the Preservation of Food	8vo,	4 00
Riggs's Elementary Manual for the Chemical Laboratory	8vo,	1 25
Robine and Lenglen's Cyanide Industry (Le Clerc)	8vo,	4 00
Ruddiman's Incompatibilities in Prescriptions	8vo,	2 00
Whys in Pharmacy	12mo,	1 00
* Ruer's Elements of Metallography (Mathewson)	8vo,	3 00
Sabin's Industrial and Artistic Technology of Paint and Varnish	8vo,	3 00
Salkowski's Physiological and Pathological Chemistry (Orndorff)	8vo,	2 50
* Schumpff's Essentials of Volumetric Analysis	Large 12mo,	1 50
Manual of Volumetric Analysis. (Fifth Edition, Rewritten)	8vo,	5 00
* Qualitative Chemical Analysis	8vo,	1 25
* Seamon's Manual for Assayers and Chemists	Large 12mo,	2 50
Smith's Lecture Notes on Chemistry for Dental Students	8vo,	2 50
Spencer's Handbook for Cane Sugar Manufacturers	16mo, mor.	3 00
Handbook for Chemists of Beet-sugar Houses	16mo, mor.	3 00

* Ogden and Cleveland's Practical Methods of Sewage Disposal for Residences, Hotels, and Institutions	8vo,	\$1 50
Parsons's Disposal of Municipal Refuse ..	8vo,	2 00
Patton's Treatise on Civil Engineering	8vo, half leather,	7 50
Reed's Topographical Drawing and Sketching	4to,	5 00
Riemer's Shaft-sinking under Difficult Conditions (Corning and Peele)	8vo,	3 00
Siebert and Biggin's Modern Stone-cutting and Masonry	8vo,	1 50
Smith's Manual of Topographical Drawing (McMillan)	8vo,	2 50
Soper's Air and Ventilation of Subways	12mo,	2 50
* Tracy's Exercises in Surveying	12mo, mor	1 00
Tracy's Plane Surveying	16mo, mor	3 00
Venable's Garbage Crematories in America	8vo,	2 00
Methods and Devices for Bacterial Treatment of Sewage	8vo,	3 00
Wait's Engineering and Architectural Jurisprudence	8vo,	6 00
Law of Contracts	Sheep,	6 50
Law of Operations Preliminary to Construction in Engineering and Architecture	8vo,	3 00
Warren's Stereotomy—Problems in Stone-cutting	8vo,	5 00
* Waterbury's Vest-Pocket Hand-book of Mathematics for Engineers	8vo,	2 50
* Enlarged Edition, Including Tables	2½ × 5½ inches, mor	1 00
Webb's Problems in the Use and Adjustment of Engineering Instruments	mor	1 50
Wilson's Topographic, Trigonometric and Geodetic Surveying	16mo, mor	1 25
	8vo,	3 50

BRIDGES AND ROOFS

Boller's Practical Treatise on the Construction of Iron Highway Bridges	8vo,	2 00
* Thames River Bridge	Oblong paper,	5 00
Burr and Falk's Design and Construction of Metallic Bridges	8vo,	5 00
Influence Lines for Bridge and Roof Computations	8vo,	3 00
Du Bois's Mechanics of Engineering Vol II	Small 4to,	10 00
Poster's Treatise on Wooden Trestle Bridges	4to,	5 00
Fowler's Ordinary Foundations	8vo,	3 50
Greene's Arches in Wood, Iron, and Stone	8vo,	2 50
Bridge Trusses	8vo,	2 50
Roof Trusses	8vo,	1 25
Grimm's Secondary Stresses in Bridge Trusses	8vo,	2 50
Heller's Stresses in Structures and the Accompanying Deformations	8vo,	3 00
Howe's Design of Simple Roof-trusses in Wood and Steel	8vo,	2 00
Symmetrical Masonry Arches	8vo,	2 50
Treatise on Arches	8vo,	4 00
* Hudson's Deflections and Statically Indeterminate Stresses	Small 4to,	3 50
* Plate Girder Design	8vo,	1 50
* Jacoby's Structural Details, or Elements of Design in Heavy Framing	8vo,	2 25
Johnson, Bryan and Turneaure's Theory and Practice in the Designing of Modern Framed Structures	Small 4to,	10 00
* Johnson, Bryan and Turneaure's Theory and Practice in the Designing of Modern Framed Structures New Edition Part I	8vo,	3 00
* Part II New Edition	8vo,	4 00
Merriman and Jacoby's Text-book on Roofs and Bridges		
Part I Stresses in Simple Trusses	8vo,	2 50
Part II Graphic Statics	8vo,	2 50
Part III Bridge Design	8vo,	2 50
Part IV Higher Structures	8vo,	2 50
Ricker's Design and Construction of Roofs (In Press)		
Sondericker's Graphic Statics, with Applications to Trusses, Beams, and Arches	8vo,	2 00
Waddell's De Pontibus, Pocket-book for Bridge Engineers	16mo, mor	2 00
* Specifications for Steel Bridges	12mo,	50

HYDRAULICS.

Barnes's Ice Formation.	8vo,	3 00
Basin's Experiments upon the Contraction of the Liquid Vein Issuing from an Orifice. (Trautwine)	8vo,	2 00

Bovey's Treatise on Hydraulics	8vo, \$5 00
Church's Diagrams of Mean Velocity of Water in Open Channels	
Hydraulic Motors	8vo, 2 00
Mechanics of Fluids (Being Part IV of Mechanics of Engineering)	8vo, 3 00
Coffin's Graphical Solution of Hydraulic Problems	16mo, mor 2 50
Fletcher's Dynamometers, and the Measurement of Power	12mo, 3 00
Fowler's Water-supply Engineering	8vo, 4 00
Frizzell's Water-power	8vo, 5 00
Fuertes's Water and Public Health	12mo, 1 50
Water-filtration Works	12mo, 2 50
Ganguillet and Kutter's General Formula for the Uniform Flow of Water in Rivers and Other Channels (Hering and Trautwine)	8vo, 4 00
Hazen's Clean Water and How to Get It	Large 12mo, 1 50
Filtration of Public Water-supplies	8vo, 3 00
Hazelhurst's Towers and Tanks for Water-works	8vo 2 50
Herschel's 115 Experiments on the Carrying Capacity of Large, Riveted, Metal Conduits	8vo, 2 00
Hoyt and Grover's River Discharge	8vo, 2 00
Hubbard and Kiersted's Water-works Management and Maintenance	8vo, 4 00
* Lyndon's Development and Electrical Distribution of Water Power	8vo, 3 00
Mason's Water-supply. (Considered Principally from a Sanitary Stand-point)	8vo, 4 00
* Merriman's Treatise on Hydraulics 9th Edition, Rewritten	8vo, 4 00
* Molitor's Hydraulics of Rivers, Weirs and Sluices	8vo, 2 00
* Morrison and Brodie's High Masonry Dam Design	8vo, 1 50
* Richards's Laboratory Notes on Industrial Water Analysis	8vo, 50
Schuyler's Reservoirs for Irrigation, Water-power, and Domestic Water-supply Second Edition, Revised and Enlarged	Large 8vo, 6 00
* Thomas and Watt's Improvement of Rivers	4to, 6 00
Turneure and Russell's Public Water-supplies	8vo, 5 00
* Wegmann's Design and Construction of Dams 6th Ed., enlarged	1to, 6 00
Water-Supply of the City of New York from 1658 to 1895	4to, 10 00
Whipple's Value of Pure Water	Large 12mo, 1 00
Williams and Hazen's Hydraulic Tables	8vo, 1 50
Wilson's Irrigation Engineering	8vo, 4 00
Wood's Turbines	8vo, 2 50

MATERIALS OF ENGINEERING.

Baker's Roads and Pavements	8vo, 5 00
Treatise on Masonry Construction	8vo, 5 00
Black's United States Public Works	Oblong 4to, 5 00
* Blanchard and Drowne's Highway Engineering, as Presented at the Second International Road Congress, Brussels, 1910	8vo, 2 00
Bleinniger's Manufacture of Hydraulic Cement (In Preparation)	
* Bottler's German and American Varnish Making (Sabin)	Large 12mo, 3 50
Burr's Elasticity and Resistance of the Materials of Engineering	8vo, 7 50
Byrne's Highway Construction	8vo, 5 00
Inspection of the Materials and Workmanship Employed in Construction	18mo, 3 00
Church's Mechanics of Engineering	8vo, 6 00
Mechanics of Solids (Being Parts I, II, III of Mechanics of Engineering)	8vo, 4 50
Du Bois's Mechanics of Engineering	
Vol I Kinematics, Statics Kinetics	Small 4to, 7 50
Vol II The Stresses in Framed Structures, Strength of Materials and Theory of Flexures	Small 4to, 10 00
* Eckel's Building Stones and Clays	8vo, 3 00
Cements, Limes, and Plasters	8vo, 6 00
Fowler's Ordinary Foundations	8vo, 3 50
* Greene's Structural Mechanics	8vo, 2 50
Holley's Analysis of Paint and Varnish Products. (In Press.)	
Lead and Zinc Pigments	Large 12mo, 3 00

* Hubbard's Dust Preventives and Road Binders	8vo.	\$3 00
Johnson's (C M) Rapid Methods for the Chemical Analysis of Special Steels, Steel-making Alloys and Graphite	Large 12mo.	3 00
Johnson's (J B) Materials of Construction	Large 8vo.	6 00
Keep's Cast Iron	8vo.	2 50
Lanza's Applied Mechanics	8vo.	7 50
Lowe's Paints for Steel Structures	12mo.	1 00
Maure's Modern Pigments and their Vehicles	12mo.	2 00
* Martin's Text Book on Mechanics Vol. I Statics	12mo.	1 25
* Vol II Kinematics and Kinetics	12mo.	1 50
* Vol III Mechanics of Materials	12mo.	1 50
Maurer's Technical Mechanics	8vo.	4 00
Merrill's Stones for Building and Decoration	8vo.	5 00
Merriman's Mechanics of Materials	8vo.	5 00
* Strength of Materials	12mo.	1 00
Metcalf's Steel A Manual for Steel-users	12mo.	2 00
Morrison's Highway Engineering	8vo.	2 50
* Murdock's Strength of Materials	12mo.	2 00
Patton's Practical Treatise on Foundations	8vo.	5 00
Rice's Concrete Block Manufacture	8vo.	2 00
Richardson's Modern Asphalt Pavement	8vo.	3 00
Richey's Building Foreman's Pocket Book and Ready Reference	16mo, mor	5 00
* Cement Workers' and Plasterers' Edition (Building Mechanics' Ready Reference Series)	16mo, mor	1 50
Handbook for Superintendents of Construction	16mo, mor	4 00
* Stone and Brick Masons' Edition (Building Mechanics' Ready Reference Series)	16mo, mor	1 50
* Ries's Clays Their Occurrence, Properties, and Uses	8vo.	5 00
* Ries and Leighton's History of the Clay-working Industry of the United States	8vo.	2 50
Sabin's Industrial and Artistic Technology of Paint and Varnish	8vo.	3 00
* Smith's Strength of Material	12mo.	1 25
Snow's Principal Species of Wood	8vo.	3 50
Spalding's Hydraulic Cement	12mo.	2 00
Text-book on Roads and Pavements	12mo.	2 00
* Taylor and Thompson's Concrete Costs	Small 8vo.	5 00
* Extracts on Reinforced Concrete Design	8vo.	2 00
Treatise on Concrete, Plain and Reinforced	8vo.	5 00
Thurston's Materials of Engineering In Three Parts	8vo.	8 00
Part I Non-metallic Materials of Engineering and Metallurgy	8vo.	2 00
Part II Iron and Steel	8vo.	3 50
Part III A Treatise on Brasses, Bronzes, and Other Alloys and their Constituents.	8vo.	2 50
Tillvon's Street Pavements and Paving Materials	8vo.	4 00
Turneure and Maurer's Principles of Reinforced Concrete Construction Second Edition, Revised and Enlarged	8vo.	3 50
Waterbury's Cement Laboratory Manual	12mo.	1 00
* Laboratory Manual for Testing Materials of Construction..	12mo.	1 50
Wood's (De V.) Treatise on the Resistance of Materials, and an Appendix on the Preservation of Timber.	8vo.	2 00
Wood's (M P.) Rustless Coatings Corrosion and Electrolysis of Iron and Steel.	8vo.	4 00

RAILWAY ENGINEERING.

Andrews's Handbook for Street Railway Engineers	3 X 5 inches, mor.	1 25
Berg's Buildings and Structures of American Railroads	4to.	5 00
Brooks's Handbook of Street Railroad Location	16mo, mor	1 50
* Burt's Railway Station Service	12mo.	2 00
Butts's Civil Engineer's Field-book	16mo, mor	2 50
Crandall's Railway and Other Earthwork Tables	8vo.	1 50
Crandall and Barnes's Railroad Surveying	16mo, mor.	2 00
* Crockett's Methods for Earthwork Computations	8vo.	1 50
Dredge's History of the Pennsylvania Railroad (1879)	Paper.	5 00
Fisher's Table of Cubic Yards	Cardboard.	25
* Gilbert Wightman and Saunders's Subways and Tunnels of New York.	8vo.	4 00
Godwin's Railroad Engineers' Field-book and Explorers' Guide.	16mo, mor.	2 50

Hudson's Tables for Calculating the Cubic Contents of Excavations and Bankments	8vo,	\$1 00
Ives and Hilts's Problems in Surveying, Railroad Surveying and Geodesy	16mo, mor	1 50
Molitor and Beard's Manual for Resident Engineers	16mo,	1 00
Nagle's Field Manual for Railroad Engineers	16mo, mor.	3 00
* Orrock's Railroad Structures and Estimates	8vo,	3 00
Philbrick's Field Manual for Engineers	16mo, mor	3 00
Raymond's Railroad Field Geometry	16mo, mor	2 00
Elements of Railroad Engineering	8vo,	3 50
Railroad Engineer's Field Book (In Preparation)		
Roberts' Track Formulæ and Tables	16mo, mor	3 00
Searles's Field Engineering	16mo, mor	3 00
Railroad Spiral	16mo, mor	1 50
Taylor's Prismoidal Formulæ and Earthwork	8vo,	1 50
Webb's Economics of Railroad Construction	Large 12mo,	2 50
Railroad Construction	16mo, mor	5 00
Wellington's Economic Theory of the Location of Railways	Large 12mo,	5 00
Wilson's Elements of Railroad-Track and Construction	12mo,	2 00

DRAWING.

Barr and Wood's Kinematics of Machinery	8vo,	2 50
* Bartlett's Mechanical Drawing	8vo,	3 00
* " " Abridged Ed	8vo,	1 50
* Bartlett and Johnson's Engineering Descriptive Geometry	8vo,	1 50
Blessing and Darling's Descriptive Geometry (In Press)		
Elements of Drawing (In Press)		
Coolidge's Manual of Drawing	8vo, paper,	1 00
Coolidge and Freeman's Elements of General Drafting for Mechanical Engineers	Oblong 4to,	2 50
Durley's Kinematics of Machines	8vo,	4 00
Emch's Introduction to Projective Geometry and its Application	8vo,	2 50
Hill's Text-book on Shades and Shadows, and Perspective	8vo,	2 00
Jamison's Advanced Mechanical Drawing	8vo,	2 00
Elements of Mechanical Drawing	8vo,	2 50
Jones's Machine Design		
Part I Kinematics of Machinery	8vo,	1 50
Part II Form, Strength, and Proportions of Parts	8vo,	3 00
* Kimball and Barr's Machine Design	8vo,	3 00
MacCord's Elements of Descriptive Geometry	8vo,	3 00
Kinematics, or, Practical Mechanism.	8vo,	5 00
Mechanical Drawing	4to,	4 00
Velocity Diagrams	8vo,	1 50
McLeod's Descriptive Geometry	Large 12mo,	1 50
* Mahan's Descriptive Geometry and Stone-cutting	8vo,	1 50
Industrial Drawing (Thompson)	8vo,	3 50
Moyer's Descriptive Geometry	8vo,	2 00
Reed's Topographical Drawing and Sketching	4to,	5 00
* Reid's Mechanical Drawing (Elementary and Advanced)	8vo,	2 00
Text-book of Mechanical Drawing and Elementary Machine Design	8vo,	3 00
Robinson's Principles of Mechanism	8vo,	3 00
Schwamb and Merrill's Elements of Mechanism	8vo,	3 00
Smith (A W) and Marx's Machine Design	8vo,	3 00
Smith's (R S) Manual of Topographical Drawing (McMillan)	8vo,	2 50
* Titworth's Elements of Mechanical Drawing	Oblong 8vo,	1 25
Tracy and North's Descriptive Geometry (In Press)		
Warren's Elements of Descriptive Geometry, Shadows, and Perspective.	8vo,	3 50
Elements of Machine Construction and Drawing	8vo,	7 50
Elements of Plane and Solid Free-hand Geometrical Drawing	12mo,	1 00
General Problems of Shades and Shadows	8vo,	3 00
Manual of Elementary Problems in the Linear Perspective of Forms and Shadow	12mo,	1 00
Manual of Elementary Projection Drawing	12mo,	1 50
Plane Problems in Elementary Geometry	12mo,	1 25
Weusbach's Kinematics and Power of Transmission (Hermann and Klein)	8vo,	5 00
Wilson's (H M.) Topographic Surveying	8vo,	3 50

* Wilson's (V T) Descriptive Geometry	8vo,	\$1 50
Free-hand Lettering	8vo,	1 00
Free-hand Perspective	8vo,	2 50
Woolf's Elementary Course in Descriptive Geometry	Large 8vo,	3 00

ELECTRICITY AND PHYSICS.

* Abegg's Theory of Electrolytic Dissociation (von Ende)	12mo,	1 25
Andrews's Hand-book for Street Railway Engineers	3 X 5 inches mor	1 25
Anthony and Ball's Lecture-notes on the Theory of Electrical Measurements	12mo,	1 00
Anthony and Brackett's Text-book of Physics (Magie)	Large 12mo,	3 00
Benjamin's History of Electricity	8vo,	3 00
Betts's Lead Refining and Electrolysis	8vo,	4 00
* Burgess and Le Chateher's Measurement of High Temperatures	Third Edition	8vo,
		4 00
Classen's Quantitative Chemical Analysis by Electrolysis (Boltwood)	8vo,	3 00
* Collins's Manual of Wireless Telegraphy and Telephony	12mo,	1 50
Crehore and Squier's Polarizing Photo-chronograph	8vo,	3 00
* Danneel's Electrochemistry (Merriam)	12mo,	1 25
Dawson's "Engineering" and Electric Traction Pocket-book	16mo, mor	5 00
Dolezalek's Theory of the Lead Accumulator (Storage Battery) (von Ende)	12mo,	2 50
Duhem's Thermodynamics and Chemistry (Burgess)	8vo,	4 00
Flather's Dynamometers, and the Measurement of Power	12mo,	3 00
* Getman's Introduction to Physical Science	12mo,	1 50
Gilbert's De Magnete (Mottelay)	8vo,	2 50
* Hanchett's Alternating Currents	12mo,	1 00
Hering's Ready Reference Tables (Conversion Factors)	16mo, mor	2 50
* Hobart and Ellis's High-speed Dynamo Electric Machinery	8vo,	6 00
Holman's Precision of Measurements	8vo,	2 00
Telescope-Mirror-scale Method, Adjustments, and Tests	Large 8vo,	0 75
* Hutchinson's High-Efficiency Electrical Illuminants and Illumination	Large 12mo,	2 50
	8vo,	4 00
* Jones's Electric Ignition	8vo,	3 50
Karapetoff's Experimental Electrical Engineering	8vo,	2 50
* Vol I	8vo,	2 50
* Vol II	8vo,	2 00
Kinzbrunner's Testing of Continuous-current Machines	8vo,	2 00
* Koch's Mathematics of Applied Electricity	Small 8vo,	3 00
Landauer's Spectrum Analysis (Tingle)	8vo,	3 00
* Lauffer's Electrical Injuries	16mo,	0 50
Löb's Electrochemistry of Organic Compounds (Lorenz)	8vo,	3 00
* Lyndon's Development and Electrical Distribution of Water Power	8vo,	3 00
* Lyons's Treatise on Electromagnetic Phenomena Vols. I and II	8vo, each,	6 00
* Michie's Elements of Wave Motion Relating to Sound and Light	8vo,	4 00
* Morgan's Physical Chemistry for Electrical Engineers	12mo,	1 50
* Norris's Introduction to the Study of Electrical Engineering	8vo,	2 50
Norris and Dennison's Course of Problems on the Electrical Characteristics of Circuits and Machines. (In Press)		
* Parshall and Hobart's Electric Machine Design	.4to, half mor,	12 50
Reagan's Locomotives Simple, Compound, and Electric	New Edition	
	Large 12mo,	3 50
* Rosenberg's Electrical Engineering (Haldane Gee—Kinzbrunner)	8vo,	2 00
* Ryan's Design of Electrical Machinery.		
* Vol I Direct Current Dynamos	8vo,	1 50
* Vol II. Alternating Current Transformers	8vo,	1 50
* Vol. III. Alternators, Synchronous Motors, and Rotary Converters (In Preparation.)		
Ryan, Norris, and Hoxie's Text Book of Electrical Machinery	8vo,	2 50
Schapper's Laboratory Guide for Students in Physical Chemistry	12mo,	1 00
* Tillman's Elementary Lessons in Heat	8vo,	1 50
* Timbie's Elements of Electricity	Large 12mo,	2 00
* Answers to Problems in Elements of Electricity	12mo, Paper	0 25
Tory and Pitcher's Manual of Laboratory Physics	Large 12mo,	2 00
Ulke's Modern Electrolytic Copper Refining	8vo,	3 00
* Waters's Commercial Dynamo Design	8vo,	2 00

LAW.

* Brennan's Hand-book of Useful Legal Information for Business Men	16mo, mor	\$5 00
* Davis's Elements of Law	8vo,	2 50
* Treatise on the Military Law of United States	8vo,	7 00
* Dudley's Military Law and the Procedure of Courts-martial.	Large 12mo,	2 50
Manual for Courts-martial	16mo, mor	1 50
Wait's Engineering and Architectural Jurisprudence	8vo,	6 00
	Sheep,	6 50
Law of Contracts	8vo,	3 00
Law of Operations Preliminary to Construction in Engineering and Architecture	8vo,	5 00
	Sheep,	5 50

MATHEMATICS.

Baker's Elliptic Functions	8vo,	1 50
Briggs's Elements of Plane Analytic Geometry (Böcher)	12mo,	1 00
* Buchanan's Plane and Spherical Trigonometry	8vo,	1 00
Byerly's Harmonic Functions	8vo,	1 00
Chandler's Elements of the Infinitesimal Calculus	12mo,	2 00
* Coffin's Vector Analysis	12mo,	2 50
Compton's Manual of Logarithmic Computations	12mo,	1 50
* Dickson's College Algebra	Large 12mo,	1 50
* Introduction to the Theory of Algebraic Equations	Large 12mo,	1 25
Emch's Introduction to Projective Geometry and its Application	8vo,	2 50
Fiske's Functions of a Complex Variable	8vo,	1 00
Halsted's Elementary Synthetic Geometry	8vo,	1 50
Elements of Geometry	8vo,	1 75
* Rational Geometry	12mo,	1 50
Synthetic Projective Geometry	8vo,	1 00
* Hancock's Lectures on the Theory of Elliptic Functions	8vo,	5 00
Hyde's Grassmann's Space Analysis	8vo,	1 00
* Johnson's (J B) Three-place Logarithmic Tables Vest-pocket size, paper,		0 15
	* 100 copies,	5 00
	* Mounted on heavy cardboard, 8×10 inches,	0 25
	* 10 copies,	2 00
Johnson's (W W) Abridged Editions of Differential and Integral Calculus	Large 12mo, 1 vol	2 50
Curve Tracing in Cartesian Co-ordinates	12mo,	1 00
Differential Equations	8vo,	1 00
Elementary Treatise on Differential Calculus	Large 12mo,	1 50
Elementary Treatise on the Integral Calculus	Large 12mo,	1 50
* Theoretical Mechanics	12mo,	3 00
Theory of Errors and the Method of Least Squares	12mo,	1 50
Treatise on Differential Calculus	Large 12mo,	3 00
Treatise on the Integral Calculus	Large 12mo,	3 00
Treatise on Ordinary and Partial Differential Equations	Large 12mo,	3 50
Karapetoff's Engineering Applications of Higher Mathematics		
* Part I. Problems on Machine Design	Large 12mo,	0 75
* Koch's Mathematics of Applied Electricity	8vo,	3 00
Laplace's Philosophical Essay on Probabilities (Truscott and Emory)	12mo,	2 00
* Le Messurier's Key to Professor W. W Johnson's Differential Equations.	Small 8vo,	1 75
* Ludlow's Logarithmic and Trigonometric Tables	8vo,	1 00
* Ludlow and Bass's Elements of Trigonometry and Logarithmic and Other Tables	8vo,	3 00
* Trigonometry and Tables published separately	Each,	2 00
Macfarlane's Vector Analysis and Quaternions	8vo,	1 00
McMahon's Hyperbolic Functions	8vo,	1 00
Manning's Irrational Numbers and their Representation by Sequences and Series	12mo,	1 25
* Martin's Text Book on Mechanics Vol. I. Statics	12mo,	1 25
* Vol II Kinematics and Kinetics	12mo,	1 50
* Vol. III. Mechanics of Materials	12mo,	1 50

Mathematical Monographs Edited by Mansfield Merriman and Robert S Woodward			Octavo, each \$1 00
No 1 History of Modern Mathematics, by David Eugene Smith			
No 2 Synthetic Projective Geometry, by George Bruce Halsted			
No 3 Determinants, by Laenas Gifford Weld	No 4 Hyperbolic Functions, by James McMahon	No 5 Harmonic Functions, by William E Byerly	No 6 Grassmann's Space Analysis, by Edward W Hyde
No 7 Probability and Theory of Errors, by Robert S Woodward	No 8 Vector Analysis and Quaternions, by Alexander Macfarlane	No 9 Differential Equations, by William Woolsey Johnson	No 10 The Solution of Equations, by Mansfield Merriman
No 11 Functions of a Complex Variable, by Thomas S Fiske			
Maurer's Technical Mechanics		8vo,	4 00
Merriman's Method of Least Squares ..		8vo,	2 00
Solution of Equations		8vo,	1 00
* Moritz's Elements of Plane Trigonometry		8vo,	2 00
Rice and Johnson's Differential and Integral Calculus	2 vols in one		
	Large 12mo,		1 50
Elementary Treatise on the Differential Calculus	Large 12mo,		3 00
Smith's History of Modern Mathematics		8vo,	1 00
* Veblen and Lennes's Introduction to the Real Infinitesimal Analysis of One Variable		8vo,	2 00
* Waterbury's Vest Pocket Hand-book of Mathematics for Engineers	2 $\frac{1}{2}$ X 5 $\frac{1}{2}$ inches,	mor	1 00
* Enlarged Edition, Including Tables		mor	1 50
Weld's Determinants		8vo,	1 00
Wood's Elements of Co-ordinate Geometry		8vo,	2 00
Woodward's Probability and Theory of Errors		8vo,	1 00

MECHANICAL ENGINEERING.

MATERIALS OF ENGINEERING, STEAM-ENGINES AND BOILERS

Bacon's Forge Practice	12mo,	1 50
Baldwin's Steam Heating for Buildings	12mo,	2 50
Barr and Wood's Kinematics of Machinery	8vo,	2 50
* Bartlett's Mechanical Drawing	8vo,	3 00
* " " " " Abridged Ed	8vo,	1 50
* Bartlett and Johnson's Engineering Descriptive Geometry	8vo,	1 50
* Burr's Ancient and Modern Engineering and the Isthmian Canal	8vo,	3 50
Carpenter's Heating and Ventilating Buildings	8vo,	4 00
* Carpenter and Diederichs's Experimental Engineering	8vo,	6 00
* Clerk's The Gas, Petrol and Oil Engine	8vo,	4 00
Compton's First Lessons in Metal Working	12mo,	1 50
Compton and De Groot's Speed Lathe	12mo,	1 50
Coolidge's Manual of Drawing	8vo, paper,	1 00
Coolidge and Freeman's Elements of General Drafting for Mechanical Engineers	Oblong 4to,	2 50
Cromwell's Treatise on Belts and Pulleys	12mo,	1 50
Treatise on Toothed Gearing	12mo,	1 50
Dingey's Machinery Pattern Making	12mo,	2 00
Durley's Kinematics of Machines	8vo,	4 00
Flanders's Gear-cutting Machinery	Large 12mo,	3 00
Flather's Dynamometers and the Measurement of Power	12mo,	3 00
Rope Driving	12mo,	2 00
Gill's Gas and Fuel Analysis for Engineers	12mo,	1 25
Goss's Locomotive Sparks	8vo,	2 00
* Greene's Pumping Machinery	8vo,	4 00
Hering's Ready Reference Tables (Conversion Factors).	16mo, mor	2 50
* Hobart and Ellis's High Speed Dynamo Electric Machinery	8vo,	6 00
Hutton's Gas Engine	8vo,	5 00
Jamison's Advanced Mechanical Drawing.	8vo,	2 00
Elements of Mechanical Drawing.	8vo,	2 50
Jones's Gas Engine	8vo,	4 00
Machine Design:		
Part I Kinematics of Machinery	8vo,	1 50
Part II Form, Strength, and Proportions of Parts	8vo,	3 00

* Kaup's Machine Shop Practice	Large 12mo	\$1 25
* Kent's Mechanical Engineer's Pocket-Book	16mo, mor	5 00
Kerr's Power and Power Transmission	8vo,	2 00
* Kimball and Barr's Machine Design	8vo,	3 00
* King's Elements of the Mechanics of Materials and of Power of Transmission	8vo,	2 50
* Lanza's Dynamics of Machinery	8vo,	2 50
Leonard's Machine Shop Tools and Methods	8vo,	4 00
* Levin's Gas Engine	8vo,	4 00
* Lorenz's Modern Refrigerating Machinery (Pope, Haven, and Dean)	8vo,	4 00
MacCord's Kinematics, or, Practical Mechanism	8vo,	5 00
Mechanical Drawing	4to,	4 00
Velocity Diagrams	8vo,	1 50
MacFarland's Standard Reduction Factors for Gases	8vo,	1 50
Mahan's Industrial Drawing (Thompson)	8vo,	3 50
Mehrtens's Gas Engine Theory and Design	Large 12mo,	2 50
Miller, Berry, and Riley's Problems in Thermodynamics and Heat Engineering	8vo, paper,	0 75
Oberg's Handbook of Small Tools	Large 12mo,	2 50
* Parshall and Hobart's Electric Machine Design	Small 4to, half leather,	12 50
* Peele's Compressed Air Plant Second Edition, Revised and Enlarged	8vo,	3 50
* Perkins's Introduction to General Thermodynamics	12mo	1 50
Poole's Caloric Power of Fuels	8vo,	3 00
* Porter's Engineering Reminiscences 1855 to 1882	8vo,	3 00
Randall's Treatise on Heat (In Press)		
* Reid's Mechanical Drawing (Elementary and Advanced)	8vo,	2 00
Text-book of Mechanical Drawing and Elementary Machine Design	8vo,	3 00
Richards's Compressed Air	12mo,	1 50
Robinson's Principles of Mechanism	8vo,	3 00
Schwamb and Merrill's Elements of Mechanism	8vo,	3 00
Smith (A. W.) and Marx's Machine Design	8vo,	3 00
Smith's (O.) Press-working of Metals	8vo,	3 00
Sorel's Carbureting and Combustion in Alcohol Engines (Woodward and Preston)	Large 12mo,	3 00
Stone's Practical Testing of Gas and Gas Meters	8vo,	3 50
Thurston's Animal as a Machine and Prime Motor, and the Laws of Energetics.	12mo,	1 00
Treatise on Friction and Lost Work in Machinery and Mill Work . .	8vo,	3 00
* Tillson's Complete Automobile Instructor	16mo,	1 50
* Tittsworth's Elements of Mechanical Drawing	Oblong 8vo,	1 25
Warren's Elements of Machine Construction and Drawing	8vo,	7 50
* Waterbury's Vest Pocket Hand-book of Mathematics for Engineers	2½ × 5½ inches, mor.	1 00
* Enlarged Edition, Including Tables	mor	1 50
Weisbach's Kinematics and the Power of Transmission (Herrmann—Klein)	8vo,	5 00
Machinery of Transmission and Governors (Herrmann—Klein.)	8vo,	5 00
Wood's Turbines	8vo,	2 50

MATERIALS OF ENGINEERING.

Burr's Elasticity and Resistance of the Materials of Engineering . . .	8vo,	7 50
Church's Mechanics of Engineering	8vo,	6 00
Mechanics of Solids (Being Parts I, II, III of Mechanics of Engineering)	8vo,	4 50
* Greene's Structural Mechanics	8vo,	2 50
Holley's Analysis of Paint and Varnish Products (In Press.)		
* Lead and Zinc Pigments	Large 12mo,	3 00
Johnson's (C. M.) Rapid Methods for the Chemical Analysis of Special Steels, Steel-Making Alloys and Graphite	Large 12mo,	3 00
Johnson's (J. B.) Materials of Construction	8vo,	6 00
Keep's Cast Iron	8vo,	2 50
* King's Elements of the Mechanics of Materials and of Power of Transmission	8vo,	2 50
Lanza's Applied Mechanics.	8vo,	7 50
Lowe's Paints for Steel Structures	12mo,	1 00
Maure's Modern Pigments and their Vehicles.	12mo,	2 00

Maurer's Technical Mechanics	8vo, \$4	00
Merriman's Mechanics of Materials	8vo,	5 00
* Strength of Materials	12mo	1 00
Metcalf's Steel A Manual for Steel-users	12mo,	2 00
* Murdock's Strength of Materials	12mo,	2 00
Sabin's Industrial and Artistic Technology of Paint and Varnish	8vo	3 00
Smith's (A W) Materials of Machines	12mo	1 00
* Smith's (H E) Strength of Material	12mo,	1 25
Thurston's Materials of Engineering	3 vols, 8vo,	8 00
Part I Non-metallic Materials of Engineering,	8vo,	2 00
Part II Iron and Steel	8vo	3 50
Part III A Treatise on Brasses, Bronzes, and Other Alloys and their Constituents	8vo,	2 50
* Waterbury's Laboratory Manual for Testing Materials of Construction.	12mo,	1 50
Wood's (De V) Elements of Analytical Mechanics	8vo,	3 00
Treatise on the Resistance of Materials and an Appendix on the Preservation of Timber	8vo,	2 00
Wood's (M F) Rustless Coatings Corrosion and Electrolysis of Iron and Steel	8vo,	4 00

STEAM-ENGINES AND BOILERS.

Berry's Temperature-entropy Diagram Third Edition Revised and Enlarged	12mo	2 50
Carnot's Reflections on the Motive Power of Heat (Thurston)	12mo,	1 50
Chase's Art of Pattern Making	12mo,	2 50
Creighton's Steam-engine and other Heat Motors	8vo,	5 00
Dawson's "Engineering" and Electric Traction Pocket-book	16mo, mor	5 00
* Gebhardt's Steam Power Plant Engineering	8vo,	6 00
Goss's Locomotive Performance	8vo,	5 00
Hemenway's Indicator Practice and Steam-engine Economy	12mo,	2 00
Hirshfeld and Barnard's Heat Power Engineering (In Press)		
Hutton's Heat and Heat-engines	8vo,	5 00
Mechanical Engineering of Power Plants	8vo,	5 00
Kent's Steam Boiler Economy	8vo,	4 00
Kneass's Practice and Theory of the Injector	8vo,	1 50
MacCord's Slide-valves	8vo,	2 00
Meyer's Modern Locomotive Construction	4to	10 00
Miller, Berry, and Riley's Problems in Thermodynamics	8vo, paper,	0 75
Moyer's Steam Turbine	8vo,	4 00
Peabody's Manual of the Steam-engine Indicator	12mo,	1 50
Tables of the Properties of Steam and Other Vapors and Temperature-Entropy Table	8vo,	1 00
Thermodynamics of the Steam-engine and Other Heat-engines	8vo,	5 00
* Thermodynamics of the Steam Turbine	8vo,	3 00
Valve-gears for Steam-engines	8vo,	2 50
Peabody and Miller's Steam-boilers.	8vo,	4 00
* Perkins's Introduction to General Thermodynamics	12mo	1 50
Pupin's Thermodynamics of Reversible Cycles in Gases and Saturated Vapors. (Osterberg)	12mo,	1 25
Reagan's Locomotives: Simple, Compound, and Electric New Edition	Large 12mo,	3 50
Sinclair's Locomotive Engine Running and Management.	12mo,	2 00
Smart's Handbook of Engineering Laboratory Practice	12mo,	2 50
Snow's Steam-boiler Practice	8vo,	3 00
Spangler's Notes on Thermodynamics.	12mo,	1 00
Valve-gears	8vo,	2 50
Spangler, Greene, and Marshall's Elements of Steam-engineing.	8vo,	3 00
Thomas's Steam-turbines	8vo,	4 00
Thurston's Handbook of Engine and Boiler Trials, and the Use of the Indicator and the Prony Brake	8vo,	5 00
Manual of Steam-boilers, their Designs Construction, and Operation	8vo,	5 00
Manual of the Steam-engine	2 vols	10 00
Part I. History, Structure, and Theory	8vo,	6 00
Part II. Design, Construction, and Operation.	8vo,	6 00

Wehrenfennig's Analysis and Softening of Boiler Feed-water. (Patterson)	8vo,	\$4 00
Weisbach's Heat, Steam, and Steam-engines (Du Bois)	8vo,	5 00
Whittham's Steam-engine Design	8vo,	5 00
Wood's Thermodynamics, Heat Motors, and Refrigerating Machines	8vo,	4 00

MECHANICS PURE AND APPLIED.

Church's Mechanics of Engineering	8vo,	6 00
Mechanics of Fluids (Being Part IV of Mechanics of Engineering)	8vo,	3 00
* Mechanics of Internal Work	8vo,	1 50
Mechanics of Solids (Being Parts I, II, III of Mechanics of Engineering)	8vo,	4 50
Notes and Examples in Mechanics	8vo,	2 00
Dana's Text-book of Elementary Mechanics for Colleges and Schools	12mo,	1 50
Du Bois's Elementary Principles of Mechanics		
Vol I Kinematics	8vo,	3 50
Vol II Statics	8vo,	4 00
Mechanics of Engineering	Small 4to,	7 50
	Small 4to,	10 00
* Greene's Structural Mechanics	8vo,	2 50
* Hartmann's Elementary Mechanics for Engineering Students	12mo,	1 25
James's Kinematics of a Point and the Rational Mechanics of a Particle	Large 12mo,	2 00
	12mo,	3 00
* Johnson's (W W) Theoretical Mechanics	8vo,	2 50
* King's Elements of the Mechanics of Materials and of Power of Transmission	8vo,	7 50
Lanza's Applied Mechanics	12mo,	1 25
* Martin's Text Book on Mechanics, Vol I, Statics	12mo,	1 50
* Vol II Kinematics and Kinetics	12mo,	1 50
* Vol III Mechanics of Materials	12mo,	1 50
Maurer's Technical Mechanics	8vo,	4 00
* Merriman's Elements of Mechanics.	12mo,	1 00
Mechanics of Materials	8vo,	5 00
* Michie's Elements of Analytical Mechanics	8vo,	4 00
Robinson's Principles of Mechanism	8vo,	3 00
Sanborn's Mechanics Problems	Large 12mo,	1 50
Schwab and Merrill's Elements of Mechanism	8vo,	3 00
Wood's Elements of Analytical Mechanics.	8vo,	3 00
Principles of Elementary Mechanics	12mo,	1 25

MEDICAL.

* Abderhalden's Physiological Chemistry in Thirty Lectures. (Hall and Defren)	8vo,	5 00
von Behring's Suppression of Tuberculosis (Bolduan)	12mo,	1 00
* Bolduan's Immune Sera	12mo,	1 50
Bordet's Studies in Immunity (Gay)	8vo,	6 00
* Chapin's The Sources and Modes of Infection	Large 12mo,	3 00
Davenport's Statistical Methods with Special Reference to Biological Variations	16mo, mor.	1 50
Ehrlich's Collected Studies on Immunity (Bolduan)	8vo,	6 00
* Fischer's Nephritis	Large 12mo,	2 50
* Oedema	8vo,	2 00
* Physiology of Alimentation	Large 12mo,	2 00
* de Fursac's Manual of Psychiatry (Rosanoff and Collins)	Large 12mo,	2 50
* Hammarsten's Text-book on Physiological Chemistry (Mandel)	8vo,	4 00
Jackson's Directions for Laboratory Work in Physiological Chemistry	8vo,	1 25
Lassar-Cohn's Praxis of Urinary Analysis (Lorenz)	12mo,	1 00
* Lauffer's Electrical Injuries	16mo,	0 50
Mandel's Hand-book for the Bio-Chemical Laboratory	12mo,	1 50
* Nelson's Analysis of Drugs and Medicines	12mo,	3 00
* Pauli's Physical Chemistry in the Service of Medicine (Fischer)	12mo,	1 25
* Pozzi-Escot's Toxins and Venoms and their Antibodies (Cohn)	12mo,	1 00
Rostowski's Serum Diagnosis. (Bolduan)	12mo,	1 00
Ruddiman's Incompatibilities in Prescriptions	8vo,	2 00
Whys in Pharmacy	12mo,	1 00
Salkowski's Physiological and Pathological Chemistry. (Orndorff)	8vo,	2 50

* Satterlee's Outlines of Human Embryology	12mo,	\$1 25
Smith's Lecture Notes on Chemistry for Dental Students	8vo,	2 50
* Whipple's Typhoid Fever	Large 12mo,	3 00
* Woodhull's Military Hygiene for Officers of the Line	Large 12mo,	1 50
* Personal Hygiene	12mo,	1 00
Worcester and Atkinson's Small Hospitals Establishment and Maintenance, and Suggestions for Hospital Architecture, with Plans for a Small Hospital	12mo,	1 25

METALLURGY.

Betts's Lead Refining by Electrolysis	8vo,	4 00
Bolland's Encyclopedia of Founding and Dictionary of Foundry Terms used in the Practice of Moulding	12mo,	3 00
Iron Founder	12mo,	2 50
" Supplement	12mo,	2 50
* Borchers's Metallurgy (Hall and Hayward)	8vo,	3 00
* Burgess and Le Chatelier's Measurement of High Temperatures Thrd Edition	8vo,	4 00
Douglas's Untechnical Addresses on Technical Subjects	12mo,	1 00
Goessel's Minerals and Metals A Reference Book	16mo, mor	3 00
* Iles's Lead-smelting	12mo,	2 50
Johnson's Rapid Methods for the Chemical Analysis of Special Steels, Steel-making Alloys and Graphite	Large 12mo,	3 00
Keep's Cast Iron	8vo,	2 50
Metcalf's Steel. A Manual for Steel-users	12mo,	2 00
Minet's Production of Aluminum and its Industrial Use. (Waldo)	12mo,	2 50
* Palmer's Foundry Practice	Large 12mo,	2 00
* Price and Meade's Technical Analysis of Brass	12mo,	2 00
* Ruer's Elements of Metallography (Mathewson)	8vo,	3 00
Smith's Materials of Machines	12mo,	1 00
Tate and Stone's Foundry Practice	12mo,	2 00
Thurston's Materials of Engineering In Three Parts.	8vo,	8 00
Part I Non-metallic Materials of Engineering, see Civil Engineering, page 9.		
Part II Iron and Steel	8vo,	3 50
Part III A Treatise on Brasses, Bronzes, and Other Alloys and their Constituents	8vo,	2 50
Ulke's Modern Electrolytic Copper Refining	8vo,	3 00
West's American Foundry Practice	12mo,	2 50
Moulders' Text Book	12mo,	2 50

MINERALOGY.

* Browning's Introduction to the Rarer Elements	8vo,	1 50
Brush's Manual of Determinative Mineralogy (Penfield)	8vo,	4 00
Butler's Pocket Hand-book of Minerals	16mo, mor	3 00
Chester's Catalogue of Minerals.	8vo, paper,	1 00
	Cloth,	1 25
* Crane's Gold and Silver	8vo,	5 00
Dana's First Appendix to Dana's New "System of Mineralogy"	Large 8vo,	1 00
Dana's Second Appendix to Dana's New "System of Mineralogy."		
Manual of Mineralogy and Petrography.	Large 8vo,	1 50
Minerals and How to Study Them	12mo,	2 00
System of Mineralogy.	12mo,	1 50
Text-book of Mineralogy	Large 8vo, half leather,	12 00
Text-book of Mineralogy	8vo,	4 00
Douglas's Untechnical Addresses on Technical Subjects.	12mo,	1 00
Eakle's Mineral Tables.	8vo,	1 25
* Ekel's Building Stones and Clays	8vo,	3 00
Goessel's Minerals and Metals A Reference Book.	16mo, mor.	3 00
* Groth's The Optical Properties of Crystals (Jackson.)	8vo,	3 50
Groth's Introduction to Chemical Crystallography (Marshall)	12mo,	1 25
* Hayes's Handbook for Field Geologists.	16mo, mor.	1 50
Iddings's Igneous Rocks.	8vo,	5 00
Rock Minerals.	8vo,	5 00

Johannsen's Determination of Rock-forming Minerals in Thin Sections	8vo,	
	With Thumb Index	\$5 00
* Martin's Laboratory Guide to Qualitative Analysis with the Blow-pipe	12mo,	0 60
Merrill's Non-metallic Minerals Their Occurrence and Uses . . .	8vo,	4 00
Stones for Building and Decoration	8vo,	5 00
* Penfield's Notes on Determinative Mineralogy and Record of Minerals' Tests	8vo, paper,	0 50
Tables of Minerals, Including the Use of Minerals and Statistics of Domestic Production . . .	8vo,	1 00
* Pirsson's Rocks and Rock Minerals . . .	12mo,	2 50
* Richards's Synopsis of Mineral Characters . . .	12mo, mor	1 25
* Ries's Clays Their Occurrence, Properties and Uses . . .	8vo,	5 00
* Ries and Leighton's History of the Clay-working Industry of the United States . . .	8vo,	2 50
* Rowe's Practical Mineralogy Simplified . . .	12mo,	1 25
* Tillman's Text-book of Important Minerals and Rocks . . .	8vo,	2 00
Washington's Manual of the Chemical Analysis of Rocks . . .	8vo,	2 00

MINING.

* Beard's Mine Gases and Explosions . . .	Large 12mo,	3 00
* Crane's Gold and Silver . . .	8vo,	5 00
* Index of Mining Engineering Literature . . .	8vo,	4 00
* Ore Mining Methods . . .	8vo, mor	5 00
* Dana and Saunders's Rock Drilling . . .	8vo,	3 00
Douglas's Untechnical Addresses on Technical Subjects . . .	8vo,	4 00
Rissler's Modern High Explosives . . .	12mo,	1 00
* Gilbert Wightman and Saunders's Subways and Tunnels of New York . . .	8vo,	4 00
Goessel's Minerals and Metals A Reference Book . . .	16mo, mor.	3 00
Ihlseng's Manual of Mining . . .	8vo,	5 00
* Iles's Lead Smelting . . .	12mo,	2 50
* Peele's Compressed Air Plant . . .	8vo,	3 50
Riemer's Shaft Sinking Under Difficult Conditions (Corning and Peele.) . . .	8vo,	3 00
* Weaver's Military Explosives . . .	8vo,	3 00
Wilson's Hydraulic and Placer Mining. 2d edition, rewritten . . .	12mo,	2 50
Treatise on Practical and Theoretical Mine Ventilation . . .	12mo,	1 25

SANITARY SCIENCE.

Association of State and National Food and Dairy Departments, Hartford Meeting, 1906 . . .	8vo,	3 00
Jamestown Meeting, 1907 . . .	8vo,	3 00
* Bashore's Outlines of Practical Sanitation.	12mo,	1 25
Sanitation of a Country House	12mo,	1 00
Sanitation of Recreation Camps and Parks.	12mo,	1 00
* Chapin's The Sources and Modes of Infection	Large 12mo,	3 00
Folwell's Sewerage (Designing, Construction, and Maintenance) . . .	8vo,	3 00
Water-supply Engineering	8vo,	4 00
Fowler's Sewage Works Analyses	12mo,	2 00
Fuertes's Water-filtration Works	12mo,	2 50
Water and Public Health	12mo,	1 50
Gerhard's Guide to Sanitary Inspections	12mo,	1 50
* Modern Baths and Bath Houses	8vo,	3 00
Sanitation of Public Buildings	12mo,	1 50
* The Water Supply, Sewerage, and Plumbing of Modern City Buildings.	8vo,	4 00
Hazen's Clean Water and How to Get It	Large 12mo,	1 50
Filtration of Public Water-supplies.	8vo,	3 00
* Kinnicutt, Winslow and Pratt's Sewage Disposal	8vo,	3 00
Leach's Inspection and Analysis of Food with Special Reference to State Control	8vo,	7 50
Mason's Examination of Water. (Chemical and Bacteriological). . .	12mo,	1 25
Water-supply. (Considered principally from a Sanitary Standpoint). . .	8vo,	4 00
* Mast's Light and the Behavior of Organisms.	Large 12mo,	2 50

* Merriman's Elements of Sanitary Engineering	8vo,	\$2 00
Ogden's Sewer Construction	8vo,	3 00
Sewer Design	12mo,	2 00
* Ogden and Cleveland's Practical Methods of Sewage Disposal for Residences, Hotels and Institutions.	8vo,	1 50
Parsons's Disposal of Municipal Refuse	8vo,	2 00
Prescott and Winslow's Elements of Water Bacteriology, with Special Reference to Sanitary Water Analysis	12mo,	1 50
* Price's Handbook on Sanitation	12mo,	1 50
Richards's Conservation by Sanitation	8vo,	2 50
Cost of Cleanness	12mo,	1 00
Cost of Food A Study in Dietaries	12mo,	1 00
Cost of Living as Modified by Sanitary Science	12mo,	1 00
Cost of Shelter	12mo,	1 00
Richards and Woodman's Air, Water, and Food from a Sanitary Standpoint	8vo,	2 00
* Richey's Plumbers', Steam-fitters', and Tinnerns' Edition (Building Mechanics' Ready Reference Series)	16mo, mor	1 50
Rideal's Disinfection and the Preservation of Food	8vo,	4 00
Soper's Air and Ventilation of Subways.	12mo,	2 50
Turneaure and Russell's Public Water-supplies	8vo,	5 00
Venable's Garbage Crematories in America	8vo,	2 00
Method and Devices for Bacterial Treatment of Sewage	8vo,	3 00
Ward and Whipple's Freshwater Biology (In Press)		
Whipple's Microscopy of Drinking-water	8vo,	3 50
* Typhoid Fever	Large 12mo,	3 00
Value of Pure Water	Large 12mo,	1 00
Winslow's Systematic Relationship of the Coccaceæ	Large 12mo,	2 50

MISCELLANEOUS.

* Burt's Railway Station Service	12mo,	2 00
* Chapin's How to Enamel	12mo,	1 00
Emmons's Geological Guide-book of the Rocky Mountain Excursion of the International Congress of Geologists	Large 8vo,	1 50
Ferrel's Popular Treatise on the Winds	8vo,	4 00
Fitzgerald's Boston Machinist.	18mo,	1 00
* Fritz, Autobiography of John	8vo,	2 00
Gannett's Statistical Abstract of the World	24mo,	0 75
Haines's American Railway Management	12mo,	2 50
Hanausek's The Microscopy of Technical Products (Winton)	8vo,	5 00
Jacobs's Betterment Briefs A Collection of Published Papers on Organized Industrial Efficiency	8vo,	3 50
Metcalf's Cost of Manufactures, and the Administration of Workshops	8vo,	5 00
* Parkhurst's Applied Methods of Scientific Management	8vo,	2 00
Putnam's Nautical Charts	8vo,	2 00
Ricketts's History of Rensselaer Polytechnic Institute 1824-1894.	Large 12mo,	3 00
* Rotch and Palmer's Charts of the Atmosphere for Aeronauts and Aviators	Oblong 4to,	2 00
Rotherham's Emphasised New Testament	Large 8vo,	2 00
Rust's Ex-Meridian Altitude, Azimuth and Star-finding Tables.	8vo,	5 00
Standage's Decoration of Wood, Glass, Metal, etc.	12mo,	2 00
Westermaier's Compendium of General Botany. (Schneider)	8vo,	2 00
Winslow's Elements of Applied Microscopy.	12mo,	1 50

HEBREW AND CHALDEE TEXT-BOOKS.

Gesenius's Hebrew and Chaldee Lexicon to the Old Testament Scriptures. (Tregelles.)	Small 4to, half mor,	5 00
Green's Elementary Hebrew Grammar.	12mo,	1 25

